

CHILD GROWTH THROUGH EDUCATION

EFFECTIVE TEACHING IN THE
MODERN SCHOOL

By

GERTRUDE HILDRETH, Ph.D.

ASSISTANT PROFESSOR OF EDUCATION,
BROOKLYN COLLEGE, NEW YORK

MLSU - CENTRAL LIBRARY



20882EX

THE RONALD PRESS COMPANY · NEW YORK

Copyright, 1948, by
THE RONALD PRESS COMPANY

All Rights Reserved

The text of this publication or any part thereof may not be reproduced in any manner whatsoever without permission in writing from the publisher

PRINTED IN THE UNITED STATES OF AMERICA

RAJASTHAN UNIVERSITY
EXTENSION LIBRARY
D U R

"I love you,"

said a great mother.

"I love you for what you are
knowing so well what you are.
And I love you more yet, child,
deeper yet than ever, child,
for what you are going to be,
knowing so well you are going far,
knowing your great works are ahead,
ahead and beyond,
yonder and far over yet."

From *The People, Yes* by
Carl Sandburg Copyright, 1936,
by Harcourt, Brace & Co., Inc.

PREFACE

Education should be a broad highway along which children travel toward adult citizenship constantly growing in social competence and responsibility under the guidance of their teachers. Because educators have established this goal and because they recognize its urgency in this rapidly changing world our educational system is undergoing marked transformation to provide the improved schooling essential to its achievement.

This volume seeks to define and interpret the newer trends in educational practice particularly as they have been developed through the principles of organized learning and unified teaching and as they relate to child and youth. The reader will here find described the application and the results of realistic learning experiences at school. He will see how children have helped plan their school life and have taken increased responsibility for their own learning. Here also are reflected the principles of unified learning as applied to relatedness in school activities to unification and synthesis in the school program to the selection of subject matter to the teaching of skills to life in the school to school community and school parent relations to training in intercultural understanding to pupil guidance and to the teacher's new role as a guide in learning. Illustrations presented have stood the test of experiment and support the claim that these methods yield desired results in pupil achievement and behavior.

This book is designed as a basic text for teacher training courses in the theory and methods of elementary education. It should also prove of worth in courses in the principles or foundations of modern education curriculum making in elementary and junior high school, and guidance and child study in education as well as in courses designed for in-service teachers and refresher courses for experienced teachers in the elementary and junior high school grades. Curriculum committees seeking to improve their educational programs will find helpful suggestions both in the text material and in the bibliographies. Laymen who desire to keep abreast of the newer educational methods or who seek to improve their local schools will obtain a fresh point of view from these pages. In addition to the above qualifications educational libraries should find of particular value the extensive reference research and bibliographical material

made available here. In-service teachers will find this book of almost continuous value in their personal libraries when planning and developing classroom activities.

While the greater amount of material here presented applies directly to the early school years, the book intentionally cuts across the traditional boundaries between elementary and secondary school. It does so because these boundaries are now being broken down in educational practice and because the principles of learning and teaching advocated here apply with equal effect throughout the learning process. It should be pointed out further that the principles and methods of unified learning and of the integrated program also can be advantageously applied in educating those children who, too frequently in the past, have suffered from the rigidity of the traditional program—the handicapped, the mentally retarded, and the gifted. Of fundamental importance is the fact that, for all groups, sequential growth is emphasized throughout the entire period of compulsory education.

Unless otherwise indicated, where research findings are cited, the source has been either *The Encyclopaedia of Educational Research* (Macmillan, 1940), edited by W. S. Monroe, or *The Reviews of Educational Research*, published by the American Educational Research Association, Washington, D. C. In the chapter bibliographies will be found numerous references which themselves contain extensive research and bibliographical material bearing upon the topics indicated. Additional study aids include questions and problems, designed for group discussion and written reports, at the end of each chapter. The writer strongly recommends that the study of the text be correlated with the observation of the application of these practices in school classrooms.

It is a very real pleasure to acknowledge my obligation to numerous colleagues and to many classroom teachers whose creative ideas for helping children to help themselves along the educational highway have proved an invaluable stimulus. I feel a particular debt to those teachers, supervisors, and administrators who have studied and debated various of the issues presented here at educational conferences and workshop sessions in Colorado, Kansas, Utah, and Canada during recent summers. Experimental work at the Lincoln School, Teachers College, Columbia University, inspired many of the ideas that appear in these pages.

GERTRUDE HILDRETH

New York
February, 1948

CONTENTS

CHAPTER	PAGE
1 EDUCATION AND LIFE TODAY	3
2 THE TREND TOWARD UNIFIED LEARNING IN EDUCATION	18
3 PSYCHOLOGICAL FOUNDATIONS OF UNIFIED LEARNING: I. PRINCIPLES OF ORGANIZED LEARNING	33
4 PSYCHOLOGICAL FOUNDATIONS OF UNIFIED LEARNING: II. PRINCIPLES OF CHILD DEVELOPMENT	51
5 FEATURES OF UNIFIED METHODS IN SCHOOL PRACTICES	67
6 LEARNING EXPERIENCES FOR THE UNIFIED PROGRAM	90
7 PLANNING AND DEVELOPING EXPERIENCES FOR UNIFIED LEARNING	111
8 THE PROGRAM FOR UNIFIED TEACHING	125
9 UNIFIED LEARNING AND THE SOCIAL STUDIES	138
10 SCIENCE IN THE UNIFIED PROGRAM	156
11 LITERATURE AND THE ARTS	166
12 EDUCATION IN INTERCULTURAL RELATIONS	191
13 EDUCATING FOR WORLD CITIZENSHIP	208
14 SKILLS IN THE UNIFIED PROGRAM	224
15 UNIFIED LEARNING EXPERIENCES FOR BEGINNERS	243
16 TOOLS AND RESOURCES FOR LIVING	259
17 LIFE IN THE SCHOOL	281
18 EDUCATION FOR HEALTH	306
19 THE COMMUNITY CENTERED SCHOOL	315
20 GUIDANCE IN PERSONAL DEVELOPMENT	339
21 PARENT-SCHOOL RELATIONSHIPS	363
22 MEETING THE NEEDS OF INDIVIDUALS	386
23 THE TEACHER'S PART IN THE GUIDANCE OF LEARNING	405
24 EVALUATION OF RESULTS WITH THE UNIFIED PROGRAM	416
INDEX	431

CHILD GROWTH
THROUGH EDUCATION

Chapter 1

EDUCATION AND LIFE TODAY

A traveler who was asked by a stranger what line he carried promptly replied "My job is directing the energies of America's greatest resource." He went on to explain that he was a school teacher.

There is no question that the world's grain harvest, the live stock, the gas and coal supply, the forests and waterways are sources of untold wealth; that the energy forces of nature can be harnessed for productive work that will yield immense dividends; but controlling and utilizing nature's resources requires the trained mind and hand of man. The world's children with their potentialities for creative endeavor are after all the best crop—our greatest national asset—for on them depends the development of the world's resources. The children in school today will be responsible for the world's peace and prosperity tomorrow.

Our Army of Potential Citizens—the Children

About 2,500,000 babies will be born in the United States this year; more than 6,800 a day; about one every 13 seconds. This coming fall over 2,000,000 children will be old enough to enter the elementary school for the first time. Altogether there will be about 20,000,000 children enrolled in the elementary schools. In addition there will be a high school enrollment of more than 7,000,000. Approximately 5,000,000 youths, between the ages of 16 and 17, are nearing adult life.

Training this army of potential citizens is truly a formidable task to be shared alike by home, school, and community.

Each new generation of children has been called the equivalent of an invasion of savages who must become civilized through the educative process. The children are essentially raw material to be converted by education into a finished product. Like unimproved property, their full value cannot be realized until their traits and capacities are developed. Education is the process that transforms the illiterate,

untrained child into a competent, responsible adult with the skills and powers that fit him for social participation.

Children's minds are so plastic, their behavior so malleable, that they can be molded as easily into one shape as another. Therefore, training children through educative procedures so that their potentialities can be developed most constructively requires continuous attention to the essential purposes of education and the goals toward which the educative process should be directed.

Education, the Basis of Social Progress

Comenius, one of the first "moderns" in education, looked upon education as serving universal needs, a "workshop of humanity," a force to create a world of peace and progress. Educated people, he believed, create the good life in any community. History proves that social and industrial reform ensues when the minds of the people are enlightened.

Thomas Jefferson said, "Educate and inform the mass of the people. They are the only sure reliance for the preservation of our liberty." He believed, as have many statesmen from his time down to the present, that education was the foundation on which democracy was to be established and maintained. The founding fathers affirmed that the American social heritage could be transmitted only by education; that the commonwealth could advance only so fast as educational opportunities were made available to all. Those pioneers, who urged universal compulsory education supported by the state, contended that no other measure would so certainly guarantee to every citizen his political rights and preserve the ideals a free people cherish. *Civic understanding, sharing ideas, and intelligent participation in family life* could not be attained without educational training and knowledge widely disseminated, with every one prepared to defend his rights as a citizen.

The leaders recognized that these objectives could not be realized unless the nation's children acquired certain habits and skills, knowledge, information, and attitudes that would equip them for their lives as citizens of the commonwealth. To learn to participate in groups, to acquire tools of communication, to develop social understandings and attitudes became the functions of the public schools. The result was the establishment of a system of state-supported common schools for mass education so that all citizens could be equipped to understand and appreciate the American way of life, and to live the part of competent citizens.

Universal education becomes a normal function of society in a democratic state, as Harold Dent and others have pointed out (7). In the United States of America we are committed to the principle that every child has a right to a wholesome environment in which he can achieve a happy, satisfying life, and educational opportunities which will aid the child in developing the fullest use of all his capacities. Schools supported by the state normally assume this training function following the child's earliest years at home. The free, tax-supported public school is the basic structure of the American way of life.

Education, a Sound Investment

Education is a sound investment. In the United States of America it is a multi billion-dollar business involving all the children of school age, an army of workers, extensive housing supplies, and equipment. Every home with children in the United States comes under the regulatory jurisdiction of local, state or federal education boards. The total expenditure for educating these pupils in the public schools is approximately three billion dollars.

In 1938 education for the nation as a whole consumed 17 per cent of the tax dollar as against 25 per cent for national defense and 16 per cent for highways. In New York state alone more than \$1,000,000 was spent for education daily in 1944. The people in our country pay more for education than for any other governmental item, except national defense and war expenditures. There are in the United States approximately 127,000 school districts having half a million board members and employing about 1,100,000 teachers. More than half the nation's schools, 54 per cent of the teachers and 88 per cent of the school buildings are located in the rural areas.

In addition to state supported educational institutions there are thousands of child welfare institutions and agencies, countless community agencies, boards, and committees, as well as parochial and private institutions whose functions are wholly or in part educational. It would be difficult to envisage a more important or more powerful instrument for human advancement than the country's public school system.

From these figures it is evident that educating children in the United States of America is 'big business'. Providing good schooling for all the children is a mammoth undertaking that offers an unparalleled challenge to every community.

Education and Social Change

That "The old order changeth, yielding place to new" is evident to every generation and in all aspects of life. Every one is forced to live in a changing world. Old customs and manners disappear, to be replaced by new beliefs, fashions, practices. Human energy creates these changes through individual and group action. Alert people do not normally tend to adapt passively to their environment, to fit into the existing state of things, but through their effort and ingenuity they manipulate the environment, recreating the world in every succeeding generation.

Evidences of the tremendous changes that have taken place during the past fifty years in science, in working and living conditions are everywhere apparent. The changes of the past 15 years, or even since the beginning of World War II, are even more phenomenal. These changes are most striking in family life, technological and scientific advance, in economic conditions, in social and educational welfare.

The homes in which many of today's middle aged generation were born had no telephone, no electric lights or gas cookstove, no bathroom (not even running water), no central heating system, to say nothing of an oil burner. There were no electric refrigerators or quick freeze units for food storage, no garages with high powered vehicles, no aluminum cooking utensils, no factory canned goods or factory made clothes, no air-conditioning and no radio, victrola or television, no sulfa drugs or vitamin tablets. No one took trips in airplanes. The atomic bomb and jet propelled plane had yet to be invented. The red plush album on the center table and a set of stereo scope views took the place of the movies. The younger children had small bags of asafetida tied around their necks to scare germs away.

The displacement of hand operated tools by power machines in this industrial age has produced a phenomenal change in our mode of life. New instruments of precision call for highly skilled operators. More goods are produced outside the home. Rapid communication of all types has shrunk national and world boundaries. Mechanical power now operates the farm. A higher standard of living in terms of material abundance is now possible than was the case a century ago. Money has a larger place in the transaction of affairs in procuring the necessities as well as the luxuries of life. The range of occupations has increased.

The modern child is surrounded by mechanical gadgets not dreamed of a generation ago. Today in the United States it is estimated that in normal times there are about 360 000 different articles on sale. Material change has accelerated so rapidly in recent years that ten years today bring changes comparable to a hundred years a century ago. Even the products of 1940 are now out of date so rapid has been the invention or improvement of articles and materials under wartime pressure. Inconceivables several years ago in science and invention become promptly outmoded. The future promises even more rapid change with the development of new sources of energy. The Atomic Age sets a new pace in invention.

The Changing Scene in Education

The educational scene is shifting with the rapid changes taking place in our world today. In 1840 no one had to go to school; today education is universal and compulsory. In 1821 there was one public high school in the United States; in 1938 25 600. In 22 years between 1917 and 1939 the high school enrollment increased 400 per cent. In 1869 only two per cent of the population of high school age was enrolled; some 80 000 students in contrast with 36 per cent in 1929.

The former gulf that existed between the educated and uneducated is rapidly passing away. Today there is wider dissemination of knowledge through the press and a corresponding increase in reading matter of all types. Public library facilities are more widely available. State supported nursery schools and kindergartens are numerous. The higher school leaving age has resulted in more universal high school education and in normal times more young people attending college. There is increased federal aid for education, a trend toward equalization of educational opportunity. Increased funds are available for universal state supported education for children and youth and for adult education. Boy and Girl Scout organizations, the spread of children's libraries and museums, the publication of books for children, garden clubs, concerts and exhibits, government sponsored youth agencies extend educational opportunity more widely than ever before.

Goals in Education

What sort of education is needed to prepare children for this new day? What types of school to fit the times in which we live?

The answer is: Whatever educational plan best suits the actual needs of children in this new age. Educational goals are defined in

terms of the children themselves, developmental tasks that are incumbent on children growing up in the world today, the everyday problems children face in attaining maturity. The all inclusive aim of education today is to enable each individual child to make the best use of all his abilities, and to acquire the skills he needs in daily life so that he can become a useful active, contributing member of his community. This general aim subdivides into a series of educational objectives, some of which are general and applicable to all children, others specific for the individual and formulated in terms of the learner and the cultural demands of the society in which he lives.

What are these basic needs of children in terms of personal growth and the social culture in which they live? The list includes the ability to meet one's day-by-day problems resourcefully, to develop the capacities and skills that make for competent citizenship, to become dependable, self responsible, cooperative socially well oriented, to become literate in using the skills of communication, to acquire the skills and habits needed for efficient, healthful living, to develop the capacity to think and act for one's self to attain vocational orientation, to understand the operation of social and economic forces in the world today, to develop the character traits that make for good personal adjustment in life, the achieving of constructive social attitudes, to develop critical mindedness as a basis for judging and evaluating. Other human values include cultural appreciations, knowledge of the physical world, spiritual concepts, aesthetic experiences, capacity for the wholesome use of leisure time, achieving competence as a family member.

Among the major developmental tasks of childhood the following have been identified (14)

- Gaining concepts of the physical world
- Acquiring an understanding of human relations with family members and others
- Learning to get along with playmates
- Learning the fundamental skills known as the three R's
- Developing concepts needed in success in everyday life
- Developing conscience and a scale of values
- Acquiring attitudes toward matters and situations in daily living
- Learning to control the emotions
- Learning to work cooperatively with others
- Learning to understand one's body
- Learning to accept one's sex role
- Gaining better command over forms of expression needed in daily living

As adolescence approaches, these same skills need to be perfected and still others are to be acquired

Achieving the social graces

Establishing new social relations with others of the same age and of both sexes

Gaining skill in economic and consumer experience

Developing broader civic understanding

Gaining a larger perspective of the world we live in

Refining and extending all physical skills

Desiring and achieving socially responsible behavior

Gaining perspective for mating and establishing a family

Achieving a philosophy of life

Preparing in a broad sense for a vocation

Several developmental goals of education will now be considered in greater detail

Personal Growth.—Today the school recognizes as its larger task helping the individual develop an integrated well founded personality with many sided interests, and worthy attitudes and purposes. A major educational objective is to help every individual live a satisfying life, to attain his objectives, to solve his problems realistically, to face difficulties courageously, to maintain a healthy, well balanced attitude toward life to be reasonable and adaptable.

The school seeks to aid personal growth through satisfying the individual's basic urges and wants to be appreciated and recognized, to be happy, to achieve, to be socially approved to have sufficient food and money, clothing, adequate living facilities and recreation to achieve a satisfying family life and release from tension and anxiety so far as these can be controlled through more adequate preparation for life. The attainment of the personal qualities needed for finding one's place in life and living usefully from day to day becomes an objective of school training.

Although emotionalized attitudes and responses are learned primarily in the give and take of life outside the school, and even before school days begin, cultivating the emotional life and training in emotional control fall within the province of school training.

Physical Well Being.—Health was formerly considered a wholly personal matter. More recently it has become a state-wide and nation wide concern because we are social beings. A group of eight-year-olds were overheard debating where in their class newssheet health items should go. Finally one member argued that such items

belonged in the society column because "it is important for everyone to know how healthy you are. Each person is a human organism needing to perform with high efficiency. Improving the health of pupils is an aim of education today. Recreation and leisure time pursuits have become the concern of the school.

Ethical Conduct and Personal Integrity.—In Colonial days the founding fathers, fearful of "that old deluder Satan," advocated mass education to enable everyone to read the Bible in the vernacular as the best antidote to evil doing and as a moral safeguard.

Education today is related to behavior and conduct. Training children in manners and morals and cultivating ethical ideals are needed to keep primitive urges under control and directed into constructive channels. Teaching children to live according to ethical standards of conduct, practicing the Golden Rule, developing personal integrity and moral courage are considered goals of education as important today as in Colonial times, for what is the use of a trained mind if the energies it controls are not directed toward noble purposes? Shall youth be permitted to remain self centered or learn to serve? Should not the school develop in boys and girls their capacity for cooperation and self control, a high sense of duty and loyalty? These questions the school answers through character training that permeates the entire life of the school.

Cultivating the Intellect and Developing the Capacity for Problem Solving.—Schools traditionally established to "train the mind and cultivate the intellect" have viewed this objective in an extremely narrow way.

The newer aim in training the intellect is not to force children to assimilate fixed knowledge, but to teach them to think creatively, to exercise intelligence in everyday matters, to locate and evaluate facts, to exercise selective judgment, to answer questions, to find reasons, and to learn for themselves. The pupils are encouraged to weigh evidence from which sound conclusions can be drawn, rather than merely to memorize factual statements, to learn to revise their ideas, to change their attitudes and points of view.

The modern world needs citizens with creative intelligence rather than conventional conformity, citizens with the ability to adjust intelligently to new situations rather than to react blindly and inflexibly according to fixed ideas, citizens who are permeable by new ideas, with an objective viewpoint, unhampered by superstition or hide-bound tradition, with complete freedom in arriving at facts. School training should help the individual meet new, unpredicted prob-

lems for which previously established modes of response are inadequate.

A goal of modern education is to keep alive the spirit of eager curiosity children show on first entering school, and to encourage the desire to continue learning. The modern world needs people who have attained skill in intelligent self-direction, who are resourceful and adaptable, who have developed flexibility and use initiative in choosing and carrying through a course of action.

Another function of education is to extend the pupil's experience and understanding, to carry him into wider contacts with natural phenomena and with mechanical forces so that he can understand the fundamental principles that control the action of natural forces and machines, principles that he might tend not to discover for himself to broaden his conception of the vast world in which he lives so that *he can more effectively deal with his physical environment and utilize it for his purposes*.

Experiments in education demonstrate that all this can be done without sacrificing factual learning, indeed, more factual information than ever will be required to enable the individual to think critically and to arrive at sound judgments.

Education for Social Responsibility, for Understanding, for Freedom—The learner's social relationships and the effectiveness of his social participation are matters of deep concern to his teachers. Leaders in education stress the need for emphasis on civic consciousness, the commonweal, the individual's responsibilities toward the group, sensitivity to human relations, his social duties and obligations in his home circle, school group, and the larger community, to balance any undue emphasis on individual rights. Both emphases are needed, for the welfare of the individual creates the welfare of the group. It is important to train and influence youth toward action that has more than narrow self-utilitarian value. Instead of regimenting youth to a single viewpoint, this means placing children in situations which broaden perspective and contribute to mutual understanding.

How to give children an understanding of contemporary society and social trends is a continuing challenge to education. School experiences contribute to this goal in a society that considers social and economic understanding basic to good citizenship. The study of social and economic trends aids the school child to understand the world in which he lives, prepares him for active citizenship, for tolerance and cooperation, helping him to understand the environment in which he may at any time find himself.

American educators believe that if a child is to play his role as a citizen in a democracy, the school must serve as a laboratory in which the essentials of democratic living are learned and practiced. It is their belief that the child who practices and prepares for social competence insures his economic future, whether in his work or in his home.

Cultural Interests and Appreciations, Aesthetic Expression.—Traditional education has been blind to children's needs for aesthetic experiences. Today educators realize that opportunities for aesthetic experience are indispensable to the learner's fullest growth. Acquainting children with art, music, and literature, furnishing opportunities to create as well as to appreciate, not solely for utilitarian purposes but for cultural values as well, are comparatively new goals in public education. Releasing creative abilities contributes to personal adjustments and increases intellectual satisfactions.

On first thought, encouraging children to be creative may appear antithetical to the thorough learning of facts and the acquiring of skills. On the contrary, creative results can be achieved only as the worker learns skills, becomes habituated to routines, and directs his energies toward specific objectives.

Developing cultural interests, acquiring hobbies, doing creative work in the arts gives a person resources within himself for leisure time. Cultural interests, in turn, may lead to permanent vocational choices.

Training in Skills and Habits, Learning Facts.—Training children to learn facts and skills, inculcating habits of work and study are fundamental objectives in every good school. Children achieve economic and social competence only to the extent that routines have become established and essential techniques and knowledge needed for daily living have been acquired. Gaining knowledge or skills for their own sake is not the desired aim, but learning the things that have meaning and value for the pupils.

All children will not develop to the same degree of achievement in knowledge and skill, but all need competence in certain fundamental skills. These include:

- The ability to work, to cooperate, and to share with others in a group
- To use the mother tongue correctly; to speak and write effectively
- To plan work, to complete work begun, to schedule time economically
- To develop the special motor and technical skills needed in the arts, music, science

- To be able to understand and interpret number concepts and relations, to use numbers with facility in computation, and to understand number vocabulary
- To become a competent consumer, to use money with discretion, to plan financial expenditures to be thrifty, to care for one's property
- To learn to interpret printed symbols, to learn the skill of reading with understanding to extract material from the printed page that applies to some problem under investigation
- To collect facts and to make unbiased observations
- To know how to locate and collect information, and to use reference materials efficiently
- To acquire mechanical skills, to choose and to be able to handle the appropriate tools, measuring devices and materials needed in various occupations
- To practice health routines and to understand health principles

These skills cannot be gained all at once, nor can they be allotted specifically to certain years in the child's life span since nearly every one of them represents developmental learning that begins in early childhood and continues throughout adult life.

One's education is merely begun at school, not completed as students assume on graduation day or when a given course is finished. All that the best school can do is to lay a foundation for lifetime learning.

Schools in Transition

No one can deny the merits of the education received by our forefathers from the devoted teacher in the "little red school house." Superior teaching can take place even under severest handicaps.

School training in the early days of our country was directed more toward producing the conforming well behaved citizen than the well-rounded, resourceful individual defined in the goals just listed.

Today, there is little excuse for limitations in any phase of childhood and youth education. The practices that prevailed in pioneering days, or even those of a generation ago, are becoming outmoded along with old fashioned farm implements, stoves, and laundry equipment. To continue its contribution to welfare and social progress the school cannot remain static in a changing world, using antiquated methods and equipment, or instilling ideas long outmoded. It must keep pace through modernized methods with social and technological advance in the world of today.

Fitting a child for the world of yesterday would be to hamper his adjustment to the rapidly changing scene. Even fitting him for the

world of today is shortsighted. How much more flexible in his thinking must the youth become who is to attain the greatest development of his capacities and fulfillment of his visions in the "World of Tomorrow" !

New patterns in schooling are evolving which fit the times in which we live. Reorientation is taking place in education to meet the adjustments demanded by social change, a process that has been greatly accelerated by the recent world war.

One of the first casualties of war in England was orthodox education (7). In America the revolution in educational practices, already under way before the war, has been further speeded and the temporary disruption the war caused in school programs is looked upon as a healthy sign for it has opened new educational vistas. Formal education tends to become remote from the demands of real life but the war pressures and opportunities forced education to provide more practical learning opportunities for children of all ages. The war emergency demanded more genuine problem solving on the part of youth, more contact with reality, a flexible curriculum to allow for emergency activities that needed to be carried on, student cooperation in school enterprises, and closer cooperation among all those responsible for the child's welfare. The preinduction courses that were initiated in the high school became the entering wedge for wholesale reconstruction of the secondary school curriculum changes that were needed to fit youth for more realistic living in the world today.

The post war period calls for genuine rethinking of the educative process for modern times making education the positive force it should be in developing children and preparing them for their future roles as competent citizens.

Modernization of our schools is needed to surround the child with more desirable cultural influences to equip him with new skills to meet the special needs of today, to give him meaningful experiences and tasks at school, realistic contacts with the community, and fuller understanding of the world in which he lives. Only then will our country have provided the training that will insure worthy citizenship during school days and later in adult life.

The reform of education lies not merely in externals—new styles in furniture, architecture and the like—essential as those changes may be—but in a re-examination of the basic purposes of education so that educational practice can be brought more completely into harmony with developmental goals of children and youth and at the same time meet the demands of social change. The chief problem

hes not in deciding whether to maintain a formal program or introduce informality into the schools whether to run educational institutions along conventional or progressive lines but how to create in every community schools that will promote the child's development in the fullest sense of the term

Vision is required in the nation's educational leaders to plan intelligently for the children's part in the new era. Peace time reconstruction repairing the ravages war has wrought and building a new world will depend upon the children in school now especially the children of America. The extension and improvement of educational opportunities are essential forces in establishing and maintaining the peace. (See Chapter 13)

Educational reform is not to be attained once and for all but rather through a continuous program of reconstruction. Radical innovations are not so desirable as a continuous examination and gradual revision of teaching practices and the curriculum.

Educational reform must come from within the school through the efforts of enlightened teachers and administrators. However the task is not for professional educators alone but a responsibility to be shared with every enlightened adult in the community. Educational progress can take place only so fast as the general public understands and subscribes to the school's task and program.

If billions of dollars can be spent in developing the best roads and parkways a nation has ever enjoyed if additional billions have been earmarked for peace time reconversion projects it seems a modest aspiration indeed to demand an all out effort for creating institutions to develop this country's greatest asset the children growing up in our midst.

What are the educative experiences that will develop the desirable personal traits and the skills needed for social competence? What are the essentials of education? What goes on in the life of a good school today? These questions arise in the minds of every thoughtful teacher and school patron whenever educational practices are under discussion.

The following chapters will outline certain basic principles of the psychology of learning and describe the types of learning experiences effective in helping children achieve their developmental goals.

QUESTIONS AND TOPICS FOR STUDY

1. What are the functions of the school today? What is the task of the school in the Twentieth Century?

- 2 List the objectives of education that will prepare children for living in the post war world
- 3 List the personal characteristics people need for participating successfully in modern society
- 4 List the changes that have taken place in your community in the past twenty five years Compare the homes in which your parents were reared with your own home now In making these comparisons do you see much evidence of *social change*? In the same way compare vocations yesterday and today
- 5 List the changes that have taken place in the schools of your community during the past fifty years In what ways are the schools in your community different from those you attended? In what ways have they remained unchanged?
- 6 Can a modernized system of education universally adopted go far toward solving our social political and economic problems? In what ways?
- 7 How well are schools with which you are acquainted meeting the goals of education outlined here?
- 8 Make a summary of the chapter
- 9 List five additional questions or exercises based on the chapter

REFERENCES

- 1 Benedict Agnes E. *Progress to Freedom The Story of American Education* New York G P Putnam's Sons 1942
- 2 Berkson Isaac B. *Education Faces the Future An Appraisal of Contemporary Movements in Education* New York Harper & Bros 1943
- 3 Bonser Frederick G. *Life Needs and Education* New York Bureau of Publications Teachers College Columbia University 1932
- 4 Clarke, Fred. *Education and Social Change* New York The Macmillan Co 1940
- 5 Counts George S. *The American Road to Culture A Social Interpretation of Education in the United States* New York John Day Co Inc 1930
- 6 Counts George S. *Education and the Promise of America* (Kappa Delta Pi Lecture) New York The Macmillan Co 1945
- 7 Dent Harold C. *Education in Transition* New York Oxford University Press 1944
- 8 Dewey John. *Democracy and Education* New York The Macmillan Co 1916
- 9 Dewey John. "Education and Social Change." *School and Home* 1934 15 289 295
- 10 Dewey John. *Experience and Education* (Kappa Delta Pi Lecture) New York The Macmillan Co 1938
- 11 Kilpatrick William H and others. *The Educational Frontier* New York D Appleton Century Co Inc., 1933
- 12 Knight Edgar W. *Education in the United States* Boston Ginn & Co 1941
- 13 Rugg Harold. *Culture and Education in America* New York Harcourt Brace & Co Inc 1931
- 14 *Aspects of Child Growth and Development A Study Guide for Teachers* Washington American Council on Education 1941
- 15 Educational Policies Commission. *The Purpose of Education in American Democracy* Washington The National Education Association, 1938.

- 16 Harvard University Staff *Education in a Free Society* Cambridge, Mass Harvard University Press 1945
- 17 *Democratic Education*. New York Progressive Education Association 1941
18. *Social Change and Education Thirteenth Yearbook of the Department of Superintendence* National Education Association. Washington The National Education Association 1935

Chapter 2

THE TREND TOWARD UNIFIED LEARNING IN EDUCATION

Reaction Against Rote Learning

Traditionally, learning at school has meant memorizing facts and mechanical drill with little reference to meanings. This method leaves little time in the daily program for children to work at challenging problems and it usurps the time children need for more meaningful experiences. Children have wasted valuable hours in meaningless rote learning and in mastering isolated details that never do become a genuine part of their equipment for solving problems.

Reading has been taught chiefly as word calling with scant reference to the meanings words convey. Arithmetic has been largely memorization of isolated facts rather than understanding of processes and principles, spelling has been practiced quite apart from the purposes spelling serves in writing. In the content fields, learnings have been divorced from the meaningful associations that would help to fix them in mind. Children have been expected to do considerable learning before reaching meanings and comprehension. It seems astonishing that school lessons which are so predominantly verbal in character should have been taught for so long without reference to meanings.

Memorizing facts in a mechanical way fails to capitalize the relatedness among separate facts and items with resultant loss in learning efficiency. From this piecemeal sort of learning there has been little carry over to learning and problem solving in daily living.

The advantages of meaningful problem solving and relatedness in children's school experiences, seeing the details in relation to wholes, are now more fully appreciated. As a result, a reaction has set in against artificial drills and formal lessons that are remote from the learner's experience and understanding. Requiring the memorization of answers to questions without reference to the larger problems to which the facts and questions pertain is falling into disrepute as a pedagogical method. The roles of meaning and understanding in

learning are more fully understood and appreciated by educators today.

Failure Due to Meaningless Learning

Children tend to learn imperfectly or not at all unless they grasp significant relationships through their learning experiences at school. Children's learning tends to be garbled and senseless when they attempt to learn without understanding. A group who had recited the *Pledge of Allegiance to the Flag* daily were asked one day to write it out. Some wrote, "I pledge a legion to the flag—one nation in the fighting," or similar distortions (8).

Children may memorize a statement such as, 'The circumference of the earth is 25 000 miles,' but they are not likely to retain the fact when it is learned apart from any true understanding of its meaning. Through experiments with globes and balls they are more likely to gain genuine understanding of the concept "circumference of the earth."

A German school boy, before leaving for America attempted to memorize the names of the chief American rivers and their lengths. Upon his arrival in America, in attempting to recite his memorized knowledge he gave the length of the Ohio as 280 miles rather than 1,280 miles, drawing the conclusion that the Hudson was longer than the Ohio. Later, when he had studied American geography in a more comprehensive way he was able to give the correct lengths of all the major American rivers without hesitation (7).

A young music student was given an etude to practice involving changing the fingers on the same key. He went at the task blindly and mechanically, making little progress and heartily disliking the exercises until his teacher pointed out the purpose of the exercise to prepare the hand to reach notes in a higher position. From then on the pupil had no difficulty with the exercise soon mastered the technique, and practiced this particular exercise with zest.

A high school girl, who had learned mechanically rather than by comprehending meanings, had difficulty with such a problem as '15 per cent of 80'. She was apt to try any one of the four fundamental processes at random without understanding the terms 'per cent' and 'of,' or sensing the meaning of the problem.

Sue, aged 13, says that she is not achieving anything in junior high school mathematics because the teacher gives her mechanical rules to follow and tells her what to do without her understanding why. "I'm hindered because they just drill it into me," she says. "Since it makes no sense, I can't remember it. There's no logic in it."

It's like mechanical wheels going round and round in my head
I can't understand it, so it doesn't stick"

Another girl who had recently transferred from a conventional school to a more progressive institution, found that the class was studying the solar system. She boasted that she knew all about the topic, having recently studied it in her formal school. The "study" had consisted of writing down five statements about the earth and solar system in her notebook. The teacher had told her that if she wrote down the statements and repeated them over and over she would know them. A test proved that she not only could not recall the statements despite having said them over and over, but she did not know the significance of any of the statements when she read them aloud.

Sometimes a strange phenomenon appears: a junior high school boy, who has no difficulty mastering intricate football signals or base ball batting averages, is a failure at school instructed, textbook mathematics. Children outside of school may learn travel routes, automobile mileages, or the names of insects readily enough, but they fail to absorb multiplication facts or vocabulary in the reading text. The difference lies in the meaning the learning has for them, their interest and purposefulness in learning.

For a person who knows no Chinese, repeating a Chinese sentence on one trial is an impossible feat, whereas repeating an ordinary but unfamiliar English sentence is easily accomplished. The reason for the difference lies in the meaning the content has for the learner. Real words are similarly easier for the beginning reader to learn than word elements.

Such a problem as learning to swim can be attacked mechanically *or with understanding*; so can any other skill which the pupil is physically and mentally ready to learn.

If the material lacks meaning and significance then the pupil might work on and on indefinitely without accomplishing much real learning. e.g. a child attempting to learn to read by pronouncing separate sounds in words.

Knowledge of the inventions that stemmed from the Industrial Revolution of 18th Century England can be learned the hard way through rote practice, or meaningfully in connection with a curriculum unit on the Industrial Revolution. In the former case, the lesson as it appears on the blackboard is somewhat as follows:

- | | |
|-----------------------------|--------------------------|
| 1 Hargreaves—spinning jenny | 4 Crompton—spinning mule |
| 2 Kay—flying shuttle | 5 Cartwright—power loom |
| 3 Arkwright—water frame | 6 Newcomer—steam engine |

7 Watt—steam engine	12 Morse—cable
8 Whitney—cotton gin	13 Morse—telegraph
9 Fulton—steam boat	14 Bessemer—steel
10 Stephenson—steam engine	15 Bell—telephone
11 Howe—sewing machine	

These facts could be more effectively learned in their rich association with events of the period, the conditions that led up to the Industrial Revolution the inventors and their lives and the meaning of each invention for industrial progress. Indirectly, much more would be learned than the bare facts of the chief inventions and the names of their originators.

Foreign vocabulary may be learned the hard way as a sheer memory feat through attempting to associate each separate word with a meaning or translation. The more profitable way is to learn the meanings of new words through their recurrence in meaningful context.

Something of the Civil War can be learned through memorizing the dates of a few battles, but more will be learned, and more permanently retained, through gaining significant understanding of the events that led up to the war and took place while the war was in progress.

Children learn to read faster and to read with better comprehension when reading is begun with easy vocabulary expressing familiar ideas in the child's own language, the method that insures understanding. Upper grade pupils make better progress in fractions when their daily lives include concrete experiences dealing with fractional parts of objects, which is the only way to insure meaningful learning.

One teacher could not seem to interest her pupils in the topic of longitude and time through a conventional textbook study. Then they became interested in a battleship that was sunk in the Pacific, got out globes and maps, and absorbed longitude and time with tremendous interest.

These illustrations suggest that children learn best when, through their own efforts, they attack problems that are of immediate concern to them, problems that arise in their own world at school or in their out of school life. A unified program that emphasizes meaningful problem solving, that capitalizes the inner relationships among various subject areas and skills, contributes to economy and permanence in learning, whereas empty verbalisms that result from memorizing statements not understood tend to impede the process. Learning mean-

ingfully results in the continual development of the learner rather than the habit of stereotyped responses

The Pupil's Part in the Learning Process

Traditionally, learning at school has been thought of as a series of changes produced in pupils by direct effort of teachers using force and compulsion. It was assumed that the child learned best by a process of committing facts to heart from material that had been preselected and preorganized for him, even predigested by textbook makers, teachers, or both.

According to one school of thought, the child's mind was considered to be a blank slate upon which anything could be written at the teacher's will. The doctrine of passivity and immobility that prevailed in education worked a hardship on the child. He demonstrated in his unruly behavior how false it was. Other erroneous conceptions prevailed, for example, that punishment for errors was the best way to stimulate improvement, or that routine drill was the best means for fixing facts in mind.

Today, enlightened teachers view learning as the result of active participation by a pupil who shows readiness for learning, in a situation that calls forth the pupil's effort. Mounting evidence suggests that the most effective learning takes place, not through passive receptivity on the pupil's part, but by means of purposeful activity. In fact, learning is viewed as a developmental process closely allied to growth, with the child learning most effectively through his efforts and strivings in terms of his functional needs. Today, the focus is on the child as a learner in a stimulating environment, with a teacher to guide the process, rather than on enforced lesson learning on the part of passive or recalcitrant children, under teacher dictation.

Formerly, the school was more concerned with conformity to established patterns. Today the pupil is guided through sequential experiences that develop his capacities and aid him in using the resources of his environment in learning. Through workshop and laboratory methods the pupils learn, discuss, experiment, execute and evaluate, achieving results that have meaning for them.

Viewed in this way, education becomes growth through guided living at school.

The teacher's task, from the modern viewpoint, is not to improve children's memorizing ability for isolated facts nor to improve children's capacity to learn to think in an abstract sense, but to provide meaningful situations in which the pupils must think through their

own problems and make their own deductions. The teacher's function is to set the stage to arrange conditions that will make it possible even necessary for children to learn with understanding.

This newer interpretation of teaching and learning does not eliminate planned lesson learning or drill, class discipline, or the need for rules and regulations to govern conduct, as the material in subsequent chapters will show, but it serves to center the educative process on the goals and purposes of the learners.

Factual learning is not undervalued; more factual learning than ever is needed in modern school studies. Organized learning principles demonstrate the economy of learning facts in relation to genuine problem solving.

Practice is not eliminated in modern teaching. On the contrary, practice is considered indispensable to mastery of skill. The school child practices more efficiently today because if his teaching has been of a sufficiently high standard he understands the purpose of practice in the learning he does.

The need for drill is not denied, but drill is reinterpreted in terms of organized learning principles. Instead of drill, understanding comes first, with the result that children practice with insight. For example, in arithmetic, number relations are first sensed through many concrete experiences with numbers. Then the number facts are fixed in mind through practice with understanding. Unless the learning can be given a meaningful setting, it is futile for the child to practice.

The revolt against rote learning as the chief method in school practice and reorientation of school experiences in terms of organized learning have a sound basis in school experimentation, child development principles, and new discoveries in the psychology of learning. Our older conceptions of how children develop have been challenged as a result of scientific child study data and new facts derived from such fields as biology, psychology, medicine, sociology, and anthropology, and traditional educational methods have been questioned in the light of accumulating evidence concerning developmental and learning processes in childhood. The most promising reforms in education today reflect this new knowledge of how children grow and learn, their interests and concerns, behavior traits, and social needs.

School experimentation with unified methods has demonstrated the advantages of meaningful problem solving with the pupils raising questions and seeking answers for themselves. Furthermore, new experiments in the psychology of learning with both child and

adult subjects responding under laboratory conditions, have demonstrated the superiority of learning through meaningful associations

The unified approach to teaching and learning at school derives its validity from child development principles and relevant data from studies in organized learning (See the data cited in Chapters 3 and 4)

An Illustration of Unified Learning in Problem Solving

The sort of realistic problem solving a child achieves in daily life is the prototype of learning with understanding This can be illustrated through the way a child tackles a common problem occurring in daily life, such as repairing a bicycle

The boy discovers that something has gone wrong with his bicycle He urgently needs the bicycle to carry his paper route, run errands, aid in the scrap drive, take a trip to the beach, go on a week end camping trip, or get to school on time Consequently, he is strongly motivated to fix the bicycle as soon as possible

The problem may appear too difficult for him to solve alone If so, he consults an adult (at school, the teacher) This consultation may call for extensive use of oral language The pupil may already have used some pretty strong language on discovering that his wheel was out of commission He may consult a manual on the mechanism of a bicycle, he may need to consult a mail-order catalog to order some spare parts If he cannot understand it all he consults a specialist in bicycle repair work If the problem is quite beyond him he may, of course, have the work done by an experienced repair man and give no further thought to the matter except for financing the repairs

If he tackles the job himself, he may do some purposeful writing in making out the order for the new parts He gains practice in arithmetic as he adds up the cost of repairs or computes measurements Indirectly, he may learn a great deal about mechanics about the large mail-order house, about manufacturing even about geography, as by products of his study of the bicycle repair job He may also learn something of the industrial arts and mechanical arts as he attempts to make the repairs

All this study and subsequent learning goes on without the boy being conscious that he is studying arithmetic, social studies science, or the mechanical arts

His bicycle problem actually carries him farther into these areas and his interest is far greater than the corresponding amount of time

spent in text book study of abstract verbal problems that would mean little to him or that he visualizes with difficulty

There are social learnings also. The other children in the block gather and confer with the owner of the bicycle. There is cooperative planning and opportunity for socialized problem solving. Several boys may go into the problem with him and offer to assist in repairing the wheel. They may find that together they can repair the damage more easily than when one boy works alone. The older boys may decide to set up a bicycle repair business in a small way, or wish to go into bicycle repair or other mechanized work as a vocation.

What is learned through this experience is retained because it was achieved through response to direct need. The learning was organized in terms of a genuine problem. It was unified because all aspects of learning bore on a central problem and all were interrelated.

During a summer vacation two teen age boys achieved the following practical learnings through actual experiences of a meaningful kind: to cut and pitch hay, cut and tie corn, help build a wall and roof a house, shoot a squirrel or a woodchuck, skin it and cure the skin, drive a truck, plant and cultivate vegetables, milk a cow and a goat, raise chickens, handle a boat, drive a horse, ride a bicycle, make linoleum blocks, and print photographs. The boys undertook all this realistic learning with zest and emerged from their summer experiences with many new competencies. Their parents' regret was that their regular schooling had so little to offer of this meaningful functional sort.

Unified Learning and the New Education

In educational practice today there is a swing away from compartmentalized subject matter and isolated teaching of skills toward greater unity in the curriculum. This trend which is in harmony with the principles of organized learning calls for changes in curriculum planning, programming, classroom organization, and teaching techniques.

A reorganization of content has been achieved and a more functional learning program has been devised. Not only in the elementary school, but in the high school division as well isolated drill is giving way to organized learning in an integrated program of school experiences.

School learning has commonly meant learning skills such as reading, arithmetic, spelling and writing in isolation. In a day when home and community living contributed more largely than today to

the child's education, schools could restrict their work largely to reading, writing, and arithmetic without much danger of cutting the pupil off from fundamental life experiences. But today the school must be concerned with all the broad phases of child development, not solely the intellectual aspects, nor a narrow range of skills. Consequently, the better schools everywhere have shifted from preoccupation with conventional academic subjects, a narrow range of skills to be learned, memorization of unrelated facts, and arbitrary rules and assignments, to a broad program of personal intellectual social learning and living (3).

The newer school programs capitalize relatedness in learning experiences and pupil initiative in the process. Education is viewed as a way of living, the school as "a society, a community of human beings learning and living together cooperatively," the best foundation for learning to live in a democracy (1, 2, 4, 5, 6, 9, 11, 12, 14, 15, 18).

The New Trends in Educational Practices

Translating organized learning principles into school practice means revision in many features of education. These changes relate to the organization of subject matter, the selection of school experiences, the daily program, the use of texts and other materials of instruction, provision for individual differences, the role of the teacher, the structure and use of the school plant and grounds, the place and character of drill, the role of the pupil in learning, the nature and use of discipline.

The new trends are in the direction of

- 1 More realistic learning experiences for children centering in problem solving
- 2 Relatedness and unification in the teaching of content and skills
- 3 More flexible daily schedules
- 4 More freedom given to the classroom teacher to work out a program of suitable learning experiences for children
- 5 More participation by pupils in planning and achieving their own education
- 6 Greater contribution of the entire life of the school to the pupil's development
- 7 More socialization in classroom procedures
- 8 More use of community resources in education
- 9 The use of more varied, modern tools and materials of instruction
- 10 A broader conception of all around personal development as an aspect of schooling with responsibility for pupil guidance in the teacher's hands

- 11 A better synthesis of school and home education
- 12 Extending educational supervision over all the children upward and downward and articulating all levels of instruction to insure continuous development

All these features will be discussed at length in the chapters that follow

These features of modern educational practice are not entirely new. From time immemorial good teachers have included all of them in their work with pupils. Any good teacher who is genuinely interested in the children tends to set as a major objective self discovery of the features that promote more realistic and rewarding learning at school. These teachers have not had to wait for pronouncements from educational psychologists and child-development specialists in planning rich learning experiences for children. To one who closely observes children day after day in the intimate teacher-pupil relationship these principles are self-evident. We are merely fortunate in having evidence from new experiments in learning and new developmental data which confirm the things good teachers have always known about how to guide children's learning.

What bearing do organized learning principles and the resulting changes in education that lead to unification have on the apparent conflict between progressive and conventional education? Organized or unified learning borrows from the best phases of both. Good education is neither staunchly traditional nor rabidly progressive. There are features of conventional education e.g. systematic drill that definitely belong in any learning program for children. Features that properly employed result in superior achievement. At the same time there are features of progressive education e.g. greater pupil participation in planning learning experiences that contribute in large measure to child growth.

Background of the Movement Toward Unified Learning in Education

Learning through organized experiences as an educational method has its roots deep in the past. This was the method that the classical Greek thinkers considered to be a means of achieving the free and good life.

In the sixteenth century Comenius wrote, taught and fought to modernize the educational practices of his day, and to save teaching from the formalism into which it had degenerated. Later Rousseau pointed out the shortcomings of the formal textbookish education so

prevalent in his day and advocated a return to teaching that was harmonious with natural child development. He preached the right of the child to be a child, the philosophy of learning through life experiences, showed contempt for spoken injunctions and prohibitions, ridiculed formalized recitations based wholly on verbal memorization, and advocated teaching through natural experiences.

Pestalozzi was among the first "moderns" who attempted to carry out in practice what Rousseau had long advocated in theory. Pestalozzi's chief contribution to education was his doctrine of "Anschauung" observation, sense experiences, perception of objects, actual experience with real things, opportunities for realistic work projects, in place of mere bookishness. These were the basic principles animating his folk school where natural crafts, the immediate environment, practical situations, and problems of immediate concern to the pupils were featured. Froebel and Herbart developed these ideas still further. The latter believed that knowledge was derived from experience, insisted on securing the learner's interest in what he was doing, and emphasized concrete experience as the basis of all genuine learning achieved by children.

Bronson Alcott, superintendent of the Concord schools in 1859, deviated from the essential three R's to include in his curriculum activities of a broadening, semisocial nature, antedating the modern education movement in this direction by some 50 or 60 years.

Francis Parker, principal of the Quincy, Massachusetts, schools from 1875 to 1880, advocated learning by socializing of school activities featuring child interest and activity as the basic principles of education. Later, in Chicago, he carried on pioneering work which effected improvements in curriculum and teaching.

The introduction of industrial arts to offset preoccupation with the formal procession of academic studies which generally prevailed in education in America had made some headway in the United States before 1900, and had broadened the range of school studies. Cooking, sewing, manual training, arts and crafts were introduced before 1890.

Since 1909, first in the primary grades, later in all the school years, the movement toward organized learning with unified teaching and problem centered activities has steadily gained adherents. In America the leading exponent of this philosophy has been John Dewey. Dr. Dewey went to the University of Chicago in 1894 where, as director of the University Experimental School, he emphasized pupil activity, richness of experience, children's interests, reflective thinking, and the importance of pupil purposes in the edu-

cative process. He identified learning with problem solving, an active mental process.

Dr. Dewey has sketched education in Utopia, where "the elders are engaged in some form of work instructive to the children, the children participating in these same activities, undertaking more complex roles in participation as they mature, assuming more responsibility and cooperation. In this program objectives external to the children's growth needs at varying stages are unthinkable" (1933).

Experimental laboratory schools in connection with American universities and independent private institutions furthered the new trends advocated by Dewey and practiced at the Chicago school. The Avery Coonley School in Illinois is an early and outstanding example, the City and Country School, New York, founded in 1915, another. The Horace Mann School at Teachers College, Columbia University, before 1900 and the Lincoln School since 1917, have been experimental centers in both elementary and secondary education where the problem-centered unified teaching philosophy has prevailed. The 'Little Red School House', New York, is an illustration of experimentation with unified teaching originating within a public school system.

From Dr. Dewey's time the movement has been sponsored largely by experimental or laboratory schools located in the larger cities, where children's opportunities for natural learning through home responsibilities and work experience were limited, where it was obvious that only the school could compensate for the deprivation and restrictions city living imposed on the young.

The project method, a fitting name for teaching and learning through experiences, advocated by Frederick Bonser and others, quickly gained adherents who were seeking an alternative to textbook study and recitation as the sole instructional technique for children. Dr. Bonser pointed out the values for children of all ages that reside in real work, values as largely cultural as practical, since they contribute to well-rounded, self-sufficient living.

There always has been a conflict between the claims of formal academic teaching and more realistic learning in education. This conflict can now be resolved through unified problem-centered education in which the activities have cultural meaning yet at the same time equip children for practical living. Cultural values as well as practical values are derived from such topics as 'Invention through the ages' or "From pioneer days to modern times in the United States."

Abroad, the Danish-born German educator, Frederick Paulsen, whose teaching exemplifies the humanistic outlook, extolled the rugged, virile qualities of pioneering life for childhood education, contrasting these values with the devitalized attempts in urban communities to make children learn something for which they saw no purpose.

In primitive society, as in early pioneer days, the growing-up process and education were identical. Furthermore, there was no artificial separation of children from adults in daily life. Children participated with the elders in the buffalo hunt, in tilling the fields, in community ceremonies. Children learned directly from life experiences, through participation in daily enterprises in field and shop; not indirectly, as now, through segregated activities in educational institutions under professional teachers. Today, the family household represents a narrow environment, in contrast to that afforded by a modern school. Even the local community may represent activities and ways of living that afford little contact with the larger world.

Paulsen believed that the domestic country life of a former day had far more to contribute to the child's functional, realistic growth than modern city life where everything the child sees is already completed instead of in process, and only the external final products are obvious; where the zoo and museum have supplanted natural things in the wild state, where materials in process of construction or use are seldom experienced at first hand and where learning at school is over-intellectualized. He believed that the country child had an advantage through his direct contact with natural things.

Dewey, Paulsen, and others asserted that education and life are interwoven, that all the true functions of education are identical with life itself. Education, they believed, could have no meaning apart from the individual's day-to-day concerns. Education consists of the sum total of the interactions between the child's behavior responses and the directional influences that play upon him, whether formal or informal, intentional or not, planned or chance circumstances. The curriculum is life itself; the teachers are all the elders in the community who influence children.

In France as early as 1905 Alfred Binet used the term "centers of interest" to denote unified school experiences involving lifelike tasks. He noted that learning was more rapid when content was organized in such a way as to promote meaningful problem solving.

In Italy Mme. Montessori demanded more freedom for child-initiated activity at school, and in Belgium Dr. Decroly developed his own unique methods for putting the activity doctrine into practice.

Dr. Decroly used the apt term, "Education Global" to describe his idea of school experiences as a total, integrated, learning process. More recently A. Ferriere has described the movement as it spread over Europe (5).

The New Education Fellowship, internationally, and the American Education Fellowship, in the United States, have pushed well ahead of current practice in advocating experiential learning for children and youth here and abroad.

Various terms have been used in referring to the newer-type learning programs. "Project Teaching" was the popular term applied in the early Twenties to activities centering about unified studies that tended to reach beyond subject matter boundaries and employed concrete experiencing. "Problem centered teaching," "unified teaching," "centers of interest," and "units of work" represent variations in terminology, widely applied for over twenty years either to the total process or selected phases, and convey the notion of broad integration among content fields and skills. Donald D. Dickie, the Canadian educator, has proposed "Enterprises" as an alternate to "projects" (4), and the most general term of all, "activities," has developed from the current interest in "activity teaching" in the elementary grades. Organized learning and unified teaching in high school more commonly are called "Core Courses," "General" or "Integrated Courses," suggesting the synthesis of content and skills from various subject fields.

Organized learning through the unified, problem centered curriculum is appropriate for the entire span of the child's school life, for earlier and later years, for slow and bright pupils. Although the pioneering work with unified teaching has been carried on for the most part with urban children the methods are equally well adapted to rural schools.

QUESTIONS AND TOPICS FOR STUDY

1. In what ways are the newer trends in education more closely in harmony with organized learning and child development principles than traditional school practices? Give actual illustrations from current practice.
2. What factors have produced the trend toward organized learning and unified teaching in the schools? Outline the historical background of the movement.
3. Summarize the contributions to modern education of one of the leaders mentioned here.
4. Observe a day's work in a modern school and describe all the changes from traditional methods.

- 5 Rate your own school according to the newer trends in education indicated in this chapter. What changes would you make in your school if you wished to bring the methods into harmony with the new trends?
- 6 Evaluate the schools you attended as a child in terms of opportunity for meaningful learning and relatedness in learning experiences
- 7 Make a summary of the chapter
- 8 List five additional questions and exercises based on the chapter

REFERENCES

- 1 Caswell Hollis L. *Education in the Elementary School* New York American Book Co 1942
- 2 De Lima Agnes *The Little Red School House* New York The Macmillan Co 1942
- 3 Dent Harold C. *Education in Transition* New York Oxford University Press 1944
- 4 Dickie Donald J. *Enterprises in Theory and Practice* Toronto W J Gage & Co 1940
- 5 Ferriere Adolphe. *The Activity School* New York John Day Co Inc 1928.
- 6 Horrall Albion H and others *Let's Go to School* New York McGraw Hill Book Co Inc. 1938
- 7 Katona George *Organizing and Memorizing* New York Columbia University Press 1940
- 8 Olander Herbert T 'Children's Knowledge of the Flag Salute' *Journal of Educational Research* 1941 35 300 305
- 9 Tippet, James S. *Schools for a Growing Democracy* Boston Ginn & Co., 1936
- 10 *The Activity Movement Thirty third Yearbook of the National Society for the Study of Education Part II Appendix 8* Bloomington Ill Public School Publishing Co 1934
- 11 *Changing Concepts and Practices in Elementary Education* Board of Superintendents Division of Elementary Schools Board of Education of the City of New York 1942
- 12 *Course of Study for Virginia Elementary Schools Grades I VII* Richmond State Department of Public Instruction 1943
- 13 *The Encyclopaedia of Modern Education* New York Philosophical Library, Inc 1943
- 14 Lincoln School Staff *Democracy's High School* New York Bureau of Publications Teachers College Columbia University 1941
- 15 Lincoln School Staff *A School for the World of Tomorrow* New York Bureau of Publications Teachers College Columbia University 1939
- 16 *Newer Instructional Practices of Promise Twelfth Yearbook, Department of Supervisors and Directors of Instruction* Washington National Education Association 1939
- 17 New York State. *Elementary School Inventory For Use in Reexamining Elementary School Theory and Practice*. Albany, N Y 1941
- 18 *Progress in Rural Education A Study of Trends Since 1930 and Suggestions for Improvement* Washington National Education Association 1940
- 19 *What Education Our Money Buys* New York State Educational Conference Board. Albany, N Y 1943

Chapter 3

PSYCHOLOGICAL FOUNDATIONS OF UNIFIED LEARNING

I PRINCIPLES OF ORGANIZED LEARNING

Learning has been defined as 'the change in performance with practice', it is the process by which behavior is modified, by which new knowledge, ideas and attitudes are acquired and by which skills are perfected. It is through learning that practiced acts become habitual and performance becomes increasingly proficient.

Certain conditions affect and control the learning process. First, there must be a learner with mental plasticity. Learning involves stimuli, drives, motivating factors, goals, and memory, as well as active mental response on the part of the learner.

There must be opportunity for repeated experiences as well as materials for practice. Previous experience affects what will be learned and how it will be learned. Certain concomitant physiological responses ordinarily accompany the learner's mental reactions. The psychological interaction of pupil and teacher is a factor in the learning process.

Progress in learning depends to some extent on learning aptitude, on native capacity, as well as on interest, motivation, mind set, effort, and a goal seeking attitude. Personal traits and physiological conditions have a bearing on the way in which children learn and the results that are attained. Individual differences in all these traits are inevitable. Children of similar age do not all have equal capacity for learning. Reward or punishment for the learner during or at the conclusion of practice has an effect on subsequent practice. In the normal child, increasing age implies increasing capacity to learn, to think, and to solve problems of increasing complexity.

Learning is achieved by children principally in two ways

1. Incidentally or indirectly in the course of development as response to functional needs. An illustration is learning the mother tongue. Each experience the child has and every situation to which he attends teaches something, whether he is intent on learning or not.

2. As the result of direct effort to learn through a series of experiences planned and directed by parents or trained teachers. Illustrations: a girl learning to do house work to help her mother or a boy helping his father in the store; learning the multiplication facts or learning to read at school.

Basic Principles

Many experiments conducted within the past twenty years have proved that learning with understanding is the only genuine form of learning. Children, and adults as well, have a hard time learning anything they do not understand. In fact, anything that contributes to meaning tends to aid learning. Almost invariably, experimentation has proved that learning by rote through mechanical repetition is an uneconomical method. Through logical methods in which the learner can see his problem as a whole, ideational material can be assimilated better, learning is faster and easier, there is greater transfer to new learning, the learning is longer retained, results are more satisfactory to the learner, and the subject's attitude while learning is superior. The learner makes a more active attack on his problem and tends to persist in his effort to learn, and the learning tends to be more permanent than learning by mechanical methods. Learning in context, in contrast with learning isolated items piecemeal, assists in achieving relatedness and organization which facilitates psychological assimilation. There is considerable experimental evidence to support these conclusions.

Early tachistoscope experiments proved that words are easier to recall and remember than nonsense syllables; that words are easier to remember when they are combined in sentences (35). Apprehension of letters combined in words was found to be greater than apprehension of unconnected letters. Early reading experiments showed that learning to read progressed faster when whole words rather than meaningless, detached, sound elements were used as the basis of practice. In learning Morse code, early experiments showed that there was quicker learning for connected discourse than for words and letters. Organization proved to be an aid to learning.

Wren Grinstead (15) has reported experiments in learning German by two different methods: (1) by looking up formal lists and (2) by reading for meaning and looking up only the unknown words. He found the contextual method superior to the word-list method, both in immediate and delayed recall.

In teaching typing, Mildred Clark and D. A. Worcester (6) have found the sentence-unit method superior to the word-unit method,

possible additional proof that organization aids learning, and J W Barton discovered that it was more expedient to teach typing by thought units than isolated letters or meaningless units (1)

Esther Swenson (32) has reported that primary children who were taught the number combinations by a generalization process had an advantage over those taught by drill. Following extensive experimentation in arithmetic, W A Brownell criticized the over-emphasis on repetitive practice in contrast to relational thinking in arithmetic. He concluded

The reasonable course of action to adopt in teaching arithmetic would seem to be that which makes the largest possible use of children's capacity for generalization. The teacher should not depend on drill as the sole method but on the understanding of facts and processes(3)

Grace McGeech's experiments (25) have demonstrated that those who used meaningful methods in learning to run a maze made more rapid progress than those who employed a more limited verbal method.

J Goodwin, Louis Long, and Livingston Welch (14) found that word associations having a species genus relationship were more effectively recalled than unrelated words.

In experiments conducted by W C Langer (21), the subjects in a learning experiment were given the task of learning which one of visual stimuli corresponded to each of ten telegraphic keys, a task devoid of any original meaning for the learner. In the course of learning, the subjects made continuous voluntary attempts to organize the material, a process which the experimenter refers to as schematization. Arbitrary associations tended to be converted gradually into meaningful associations. Joy P Guilford (16) showed that it was more difficult for subjects to learn a series of items in which there was no apparent organization than to learn a series following some rule or principle in which a form or plan could be discovered.

Perception, the psychological process basic in all learning and conceptual thinking is by its very nature an organizing process, as the Gestalt psychologists have shown (36). In seeing a picture or hearing a song we perceive not isolated colored bits or separate notes in musical harmony, but we apprehend the colors or sounds in meaningful units.

According to the Gestalt psychologists, learning is most successful through reasoned responses or organized reaction to the material to be used, in other words, through the use and development of a unifying factor termed insight. The learner does not profit from experiences unless they lead to insight or understanding.

It proves to be easier to form associations between data that have some natural or learned relation, for example, the words "chair—table," than between words chosen at random, "chair—map," or nonsense syllables. The more related the learner's experiences, the better they are retained and the more fully they enter into behavior.

Both adults and children are loath to learn senseless material, and become exasperated with meaningless tasks. Instead of continuing artificial or arbitrary repetition, they try to achieve an understanding of principles. Learning mechanically proves to be a difficult and irksome task. Children either soon give up or try to invest the routine, meaningless job with meaning.

An Experiment with Puzzle Solving.—In order to compare problem solving by school children under conditions that afforded understanding and conditions that did not, the writer (18) used colored jigsaw puzzles in an experimental test situation. The following conclusions were reached:

- 1 A reliable difference was found between the time required for puzzle solving with understanding *versus* blind puzzle solving, a difference in favor of the former.
- 2 The number of moves was fewer when children worked with insight. The experience of seeing the whole puzzle beforehand apparently aided the child in thinking in an organized way and saved much random fumbling.
- 3 In their attitude while solving puzzles meaningfully the children indicated that this process was more enjoyable, easier, more interesting than blind puzzle solving which often left them bewildered.
- 4 They talked more when working the meaningful puzzles, verbalizing the moves a process which seemed to aid the solution. They did more thinking and intelligent questioning, judging from their behavior and comments.
- 5 Working a puzzle with understanding of its content in contrast to random manipulation had some carry over to the next puzzle whether or not it was presented with instruction judging from the children's comments their increased confidence and the tendency to look for meaningful relationships.

These results prove, at least so far as puzzle solving is concerned, that giving children an over all view of the whole, rather than requiring them to "work in the dark," results in less random trial and-error attack, more tendency to work with understanding and insight, better workmanship and more willing attitude.

Recent Experiments in Organized Learning

Among the most significant recent studies in organized learning are those conducted and described by George Katona (20). He gave adult subjects card tricks and match tricks to do, number series and nonsense syllables to memorize. Although none of the experimental work was done with children, the implications of the findings for younger subjects were pointed out. This research was undertaken to clarify the role of organization in the learning process. The conclusion reached was that the most successful learning proceeds by grasping meanings.

Katona found that the subjects who learned by understanding were superior in retaining old knowledge and in solving new problems, compared with those who tried to learn by memorizing. He found that there was little loss in learning when problems were solved through discovering principles and that learning with understanding had more transfer effect or carry over than learning mechanically.

Dr. Katona found that learning became easier with organization and answers were given with greater certainty. Furthermore, in learning by understanding the learner was in a more favorable position to correct his errors than when he learned by rote memory.

It is sometimes asserted that memorizing is a first necessary step in learning by understanding; that organization depends on a great amount of memorized knowledge. Katona did not find this to be so. For example, learning was possible without repetition of a number series if it was organized so as to have meaning for the learner. He found, as other experimenters have done, that the subjects were inclined to stop memorizing a meaningless series. Instead of repeating artificial groups, they wanted to achieve an understanding through discovering a principle.

In later experiments, Katona (19) found that final scores made by a group of students reading a text organized around a principle were better than those of a group reading a text based upon an enumeration of facts.

Drill and Repetition.—Katona found that learning by understanding could occur without repetition, but that in many cases single exposure was insufficient. He states that the notion that repetition is not needed in learning is false.

He found that repetition in skill acquiring situations is not repetition of one set of identical elements, rather it is a gradual develop-

ment of structural features. The learner does not do the same thing over and over. On the contrary, he is always passing on to a more advanced stage of performance. The effects of mechanical memorization and drill, on the contrary, are restricted to specific materials and therefore do not help to bring about organization of new situations.

Applicability.—One test of learning must always be its applicability. Integrated, organized learning shows up better on this test than mechanical learning, according to Katona. Can the learner four weeks later find the square root of numbers other than of 157 which he has practiced? The person who memorizes is helpless when confronted with a new task. The organizer can handle it because meaningful learning is applicable and more lasting. Dr. Katona concluded: Learning by understanding proved to be a much better method than learning by stereotyped repetitions, if the ability to solve new tasks is the criterion of learning. Meaningful learning results in the acquisition of integrated knowledge which is usable under different circumstances.

Retention.—One question Katona considered was: "Which persists longer—words and numbers memorized by frequent repetition or the same material as a well understood part of a meaningful whole? Experimental evidence points to the second alternative . . ." In memorizing, earlier results were better than the later ones. In understanding, average performance after several weeks was as good as the first. Immediately after training there was a slower rate of decay of the traces formed by learning by understanding than of the traces formed by memorizing.

It was found that retention of well understood tasks remained high even without intermediate practice. Forgetting did not begin immediately. Quick and easy senseless learning resulted in brief retention of one trick; slower and more difficult understanding yielded knowledge applicable to many variations of the trick even after a long period of time.

In summary, Katona demonstrated that learning with understanding, and attacking problems by noting relationships, improved retention and applicability of the new learning; that drill and repetition were needed in organized learning; that learning with understanding was a gradual process, and that there was more chance for pupil discovery of error in working with meaningful than with meaningless material. The discovery of relationships in the material was a distinct aid to learning.

Dr Katona's experiments indicate the value to the learner of learning through actual contact with things and through first hand experimentation. A good teacher assists by showing the child how to attack a problem, and through giving instruction in technique.

Successful experimentation with organized learning has focused attention within recent years on this newer method of presenting subject matter in the classroom. The implications of organized learning for classroom method have been indicated by Decroly in the language arts (the global method) (9)

May Seagoe conducted a number of experiments in whole part learning in which instructional material was used in the social studies, French, manuscript writing and the learning of a nonsense poem (31). In teaching social studies material superiority was demonstrated for closely integrated units. In French the context method proved to be superior to segregated vocabulary learning. In manuscript writing there was a consistent though slight superiority for the whole method and similarly in learning a nonsense poem the differences in the two methods were slight but in favor of 'whole' learning. Learning proved to be better when the learner understood his problem as a whole.

Seagoe concluded that 'in curriculum making the present emphasis on integration would seem to have justification within limits. Integrated wholes are more economical in eventual mastery and retention. The selection of lifelike units within the grasp of the learner would seem justified.' Seagoe observed however, that a so-called unit could have relationship or be taught in organized fashion or not, depending upon the teacher's skill and insight. Calling the organized material a unit does not make it so. What is done by the teachers and pupils in working on the unit determines whether organized learning will take place.

John F. Dashiell (8) has concluded that learning through seeing and using relationships is always more possible when—

The learner is more mature more intelligent more accustomed to meeting problems through reflection

He is fairly well acquainted with the problem or can relate it to other problems with which he is familiar

Both the problem and the goal are within the perception and comprehension range of the learner

The problem is chiefly one that lends itself to learning with insight for the reasons given above

In learning almost any skill relatedness can be capitalized to good advantage. The better or more experienced student tends to do a

maximum amount of organizing as he learns. Good learners working in a familiar field, e.g., music, do more organizing.

Meaningful learning does not necessarily take place all of a sudden or come in a flash. It may require considerable trial and error, depending on the maturity of the learner and the difficulty of the task. The learner must go into the problem far enough to see its interrelationships and implications. A child who does not reach this state falls back of necessity on trial and error. Errors in inference may arise from inadequacy in the pupil's experience or background.

The Goal-Seeking Attitude in Learning

According to Dashiell the most effective learning takes place when the learner is goal-seeking, provided with objectives he is seeking to attain, and has a clear view of his goals. Behavior in general moves in the direction of need satisfaction. Learning is most successful when one has a purpose in learning and when that purpose arises from deep-seated needs.

Developmental Learning

Learning is an integral phase of child development for it plays a part in all behavioral growth. Learning takes place concomitantly with the growth of the organism, for the whole growth process is a forward-moving series of changes. From one stage to the next, as age increases, the normal child is able to do what he had not succeeded in doing previously. Developmental learning takes place through an aggregation of impressions, each new experience contributing something to improved skills, sharpening of perception, and enlarging concepts.

Developmental learning shows several predominant characteristics:

It is essentially organized learning

It is spontaneous and self-initiated, incidental rather than consciously determined upon

It tends to be strongly purposive and goal seeking

It is essentially a growth process, dependent upon maturation taking place within the organism as well as upon stimuli from without

By definition, readiness is invariably present

Orderly sequences, universal in childhood, can be identified in developmental learning, for instance, in learning to walk and talk, to distinguish the real from the fanciful, to make social adjustments.

Parents and teachers can place great confidence in maturation forces to produce favorable changes in children's behavior

Incidental, Spontaneous Learning

Every child tends to learn from whatever he is doing. Spontaneous learning is not characterized by direct effort to memorize something or to improve a skill, but is the child's normal response to the everyday situations he meets. For example, a boy might learn considerable about current events, even about dogs and their habits while carrying a newspaper route. He would be pretty certain to absorb considerable geography in a trip across the United States. Spontaneous learning often takes the form of unconscious imitation of the child's elders: e.g., in learning to tip one's cap on meeting friends, eating with the right hand, or using certain linguistic expressions. Spontaneous learnings are sometimes achieved concomitantly while direct learning is in progress, e.g., improving in habits of neatness during arithmetic lessons.

A little girl, six and a half years of age, could do "4 plus 4" without having been taught. Her father asked how she knew. She said, "I always count the children during rest period. Two rows of cots, four children to a row." Although the word "gang" does not occur in any course of study, by grade IV 93 per cent of all children can spell it. Children normally learn through their spontaneous questions. One seven-year old, who had been raised abroad and knew three languages, made rapid strides in learning English when she came to America. She was observed continually asking her mother "How do you spell—?" "How do you say—?" "How do you know that—?"

A sailor said that while he was adrift on a raft he realized "all of a sudden" that his very life depended upon what he had learned incidentally while playing hooky from school!

Far more incidental learning takes place than teachers realize. It outweighs in amount all formal learning through lessons. Even during the school years children's most genuine learnings are largely informal, spontaneous, or indirect. This generalization applies equally to learning habits, facts, concepts, and attitudes.

In this natural sort of learning, an organizing process takes place as the child reacts to environmental situations. This is inevitable since he is responding to total, meaningful situations. If they were not meaningful he would not be responding to these situations but to others more in harmony with his concerns. Spontaneous learning is

highly effective because it is purposeful and organized. The child derives the principles of what he is learning for himself; he learns selectively, unconsciously. There are no external goals or standards to be met; the child sets his own problems and goals for learning. The learning is done in response to the child's inner needs and basic drives.

Spontaneous learning is often the child's most successful method, because he is invariably "ready" for his own self-initiated learning tasks.

Interest and Effort as Motivating Factors in Learning

Some years ago Dr. Dewey made a classic pronouncement about interest and effort in learning that was at variance with the currently accepted view of the subject (11). He saw interest and effort as complementary, not opposing concepts and asserted that effort was genuinely exerted only when the learner's or worker's interest was fully aroused, that interest furnished the motive power for effort. Before that time educators generally believed that interest and effort were contradictory terms, that effort was made only when the learning task was difficult, disagreeable, or distasteful. Today educators view interest and effort as mutually related factors in learning rather than two opposing forces.

A still newer interpretation identifies interest and effort with learning through understanding. The individual is readily motivated to learn whatever he identifies as meaningful for him. This is a general assumption for which there are many exceptions, but in general its basic truth can be demonstrated. Who has not seen children working as though their lives depended upon it, working beyond the normal fatigue point, even without heeding visceral needs, disregarding cold and hunger, when they were engaged in genuinely worthwhile tasks centering about their own concerns? The desirable qualities, concentration and attention, are intrinsic in meaningful learning situations.

If the child can do the task (and he can if it lies within his range of understanding), he can become interested in it and will make the necessary effort to learn. A teacher may say of a child, "His difficulty in learning to read is that he cannot concentrate." The truer statement usually is that he fails to concentrate because he is uninterested. He is certain to lack interest if the process, for any reason, is meaningless to him.

Interest is largely a matter of identifying one's self with the problem. A certain child was altogether uninterested in studying about South America, yet when his uncle left on a business trip for Latin American countries the child showed the most avid curiosity to learn all he could about the countries his uncle visited. Children will practice with enthusiasm when something seems important to them.

There is no such thing as interest, attention, or concentration in the abstract sense. Interest is always directed toward something, concentration means application to some specific task.

Learning with understanding supplies its own intrinsic rewards. Praise or punishment as stimulant to or deterrent from learning becomes unnecessary, and hence their use outside of laboratory experiments need scarcely be considered. Organized learning supplies its own motivation obviating the necessity for artificial stimulus to make the individual desire to learn.

Readiness for Learning

By readiness for learning is meant a condition of the individual learner mentally and organically, that makes it possible for him to progress in learning. Readiness may be expressed in terms of adequate mental maturity, psycho motor adjustment and development, maturity of sensory equipment, and favorable attitude or mind set. The "ready" individual has the requisite background to assimilate the new learning whether it is in terms of skills, facts or attitudes.

It is easy to understand how important readiness is from conclusions of experiments in organized learning. Readiness might be reinterpreted as the condition which enables the learner to learn through understanding, organizing the content, rather than having to fall back on trial and error because he is not mature enough or lacks the proper attitude to learn otherwise. It seems useless to try to arouse the child's interest in a task that is beyond his understanding more sensible for a teacher to stimulate a child's interest in matters or skills that are well within his learning capacity. Ordinarily when increase in the difficulty of tasks is adjusted to the learner's rate of development, motivation remains high. A state of readiness causes the individual to put forth the necessary effort to fix the new learning data in mind.

If the child is ready to learn

1. He is mature enough to learn through thinking rather than through mechanical memorizing.

2. Learning meaningfully results in immediate success which helps to establish a favorable attitude
3. He can learn through self-teaching, to a degree, because he understands the implications of the problem.

How Practice Aids Learning

Under comparable conditions the more frequently practiced items are easier to remember than the less practiced. For example, the letters Q, V, X, Y, Z, are absolutely no more difficult to learn than A, B, C, D; yet school children invariably show less retention and recognition of the former letters than the latter. The difference is due to practice. The rarely seen and used letters fail to be learned as securely as those frequently used. Similarly, the notes high above the staff or far below are annoyingly difficult for the amateur musician to locate on the piano, not because of any inherent difficulty in these notes, but because they are infrequently practiced. Retention can be improved only with practice. How much practice is needed depends on the nature of the task, the degree of "overlearning" that is desirable, and the characteristics of the learner.

One cannot name a basic psycho-motor skill such as sports, typing, precision machine work, sewing, music, or art that is not acquired, improved, and habituated through practice. However, the amount of repetition required for mastery depends in large degree upon the extent to which the practiced material has meaning for the learner and how far practice is accompanied by understanding.

Dr. Paul L. Boynton has observed that learning may progress in direct opposition to the factor of frequency of repetition or drill. Drill appears to be an effective aid to learning when it is part of a larger configuration involving pupil interest, understanding, desire, and purpose.

Hours can be spent on practice without noticeable improvement if the learner fails to distribute practice periods economically, if he practices carelessly with poor form, if he overdoes practice until he is fatigued, if he fails to isolate and to work intensively on the more difficult parts, if he practices only on detached segments of the skill to be learned.

Transfer of Training Through Meanings

Transfer of training is a topic of perennial interest to teachers because of its implications for school learning. By transfer of training is meant the extent to which learning of skills, facts, or principles

achieved in one situation, or under certain given conditions, aids new learning. As a result of studying or practicing a skill X the pupil normally masters X . Transfer of training refers to any additional learnings that also may take place in skills such as Y and Z . This concept, which involves the generality and specificity of learning, is known in psychology and education as "*formal discipline*."

To what extent and in what way does knowing how to play baseball aid in learning to play tennis? To what extent does learning to spell "kitchen" aid in spelling "circumstance"? Can we depend upon knowledge of short division to promote the learning of long division? To what extent does practice in sounding phonetic elements of words aid word pronunciation? Does piano playing help in automobile driving? Will practicing finger exercises at the piano increase skill in playing "pieces"? Will exercises improve proficiency in typing? If neatness learned in one situation transfers to neatness in others without additional practice or instruction, if spelling is much improved through developing a spelling conscience, then great economy in learning and teaching can be effected. If there is little transfer effect from one learning situation to another, if learning is highly specific, then learning one skill cannot be counted upon to aid another not closely related to the first.

The once widespread acceptance of the doctrine of transfer of training resulted in classical education becoming highly valued, not for its content, but for its difficulties which were assumed to "*strengthen the mind*."

At the turn of the century a reaction against the doctrine as applied to school learning set in. Learning was believed to be highly specific rather than generalized, and classical studies were no longer prized for their "*mental discipline*" value.

Again the pendulum swings back with new experiments that throw more light on organized learning. Today there is a renewed faith in the possibilities of transfer that resides in learning with understanding. Transferred learning is observable in many situations though whether these transfer effects will be great or small depends upon many conditions now better understood than formerly. Transfer effects depend in part on how children are taught.

The newer theory of transfer in harmony with functional learning theory is that indirect learning takes place to the extent that there is generalizing, insight, meaning, and organization in the learning task undertaken. Dr. Katona has shown by experiment that meanings and generalizations are essential for transfer effect. The newer conception of transfer is that of "carry-over" and "applying." "Organ-

izing" was found to be the important element in transfer effect from one situation to another. The more significance the learning had, the more apt it was to transfer. Transfer depends in part on the relatedness that can be perceived between one learning pattern and another.

A good illustration of presence or lack of transfer depending upon meaningful organization is found in primary reading instruction. When children are taught phonics through formal drill as so many syllables in a vertical row whose sounds they are to memorize, there is little direct transfer from this learning to reading. On the contrary, when sounding is taught within words that are already familiar and learners are shown the application of the technique to new words met in context, there is rapid gain in reading skill. Herbert Carroll found "generalizing" in spelling the significant element in transfer (5).

Most traditional teaching, with its emphasis on isolated drill and memoriter learning, by its very nature prevents transfer from taking place. Seeing relationships between one phase of drill and another in basic processes such as arithmetic becomes impossible. To obtain maximum or even partial transfer the school must reorganize teaching so that pupils can learn through grasping meanings.

Whole-Part Learning

Should the learning be done by wholes or parts? In learning to speak a "piece" or to memorize a piano selection, should the learner practice the whole from the beginning each time or break the whole task up into segments to be studied and learned independently of each other? This is a fundamental question for education since it has a bearing on organized learning. The concept of "wholeness" would imply organization.

When children learn spontaneously or incidentally, they tend to learn by the "whole" method. In learning to walk, talk, or ride a "kiddie car," the child does not begin by analyzing the skill into its parts, instead he "learns all over." An American boy of seven living in China learned French and Chinese at the same time by babbling these languages to the people who addressed him in the respective tongues. When asked by an English friend what progress he was making in French he replied he was doing fine. He explained, "I just say anything and they can understand some of it." He was learning to speak French by talking French "all over," not by isolating nouns and verbs to memorize or beginning with grammar paradigms. In learning to ride a bicycle, how ludicrous it would be if one

should attempt to learn to ride by parts. Yet in many artificial school lessons this feat is required.

The learner who begins with understanding of the whole can practice with insight. But learning by practicing the whole each time is only a partial answer to efficient learning. The time soon comes in practice by wholes when it is most economical to extract or isolate elements in the whole for intensive practice with resulting improvement in performance.

In piano practice the learner does not know until the whole piece has been tried what are the hard spots that will need relatively more practice. Consequently it would be futile for him to practice solely by parts from the beginning. Later isolating the hard parts for separate practice quickly smooths out the whole for the practice of the parts is done with understanding of their relevancy to the whole.

The present ping pong champion of the world who first began learning the game at eight years of age by sixteen was winning the boys club championships. A year or so later he met a real champion who promptly outplayed him. After several severe beatings he resolved to improve his game through some systematic drill. Instead of spending all his spare time playing the game he decided to practice separate strokes against a wall smashing the balls about until he developed his forehand chop and backhand strokes. Soon after undertaking this intensive practice on strokes he found that he could beat everybody.

In typing certain rare or difficult letter combinations are isolated for practice. In handwriting certain strokes and letter forms must be given selective attention. In reading the more difficult and complex sound combinations are isolated for drill. In tennis the backhand stroke is faithfully practiced apart from the game. The painter works on certain strokes he wishes to perfect. The novice motorist practices backing into a narrow space. This practice on parts is beneficial so long as the relation of the parts to the whole to which they relate is not lost sight of so long as rehearsing the whole continues simultaneously with practice on the parts. When details are practiced in this way they can easily be fitted back into the whole without losing their connection to the total task. In some cases practice by isolated parts is not necessary at all for example the young child learning to walk or to ride a tricycle.

When the learner starts with the larger units first he can more easily identify the hard spots and thereby save time for he finds it is not necessary later to give equal practice to all the details. More practice falls on the difficult spots than on the easy ones.

Practice of isolated parts is not drudgery when the learner has already experienced the parts through working with the whole; on the contrary, it is interesting, purposeful, and pleasurable because the learner sees the value in practicing the parts and, by practicing with understanding, gains some satisfaction in developing the skill he is seeking to perfect.

From a summary of the principal findings regarding whole-part learning A. I. Gates et al (13) concluded that no clear-cut generalizations could be drawn. Whether one method was superior to the other would depend on many factors that are difficult to analyze. It is difficult at times to identify in a problem what constitutes the whole or the part. R. S. Woodworth (35) concluded that many experiments demonstrate the superiority of the whole, or global, method in learning, the reason being in each case that, under the conditions of the experiment, meaningful organization and seeing relationships in the material played a large part in learning by wholes. In fact, whether the whole or part method is superior depends chiefly on whether or not there is logical organization in the learning content, and on the integration that resides in or can be discovered in the material.

Conflicting results from learning experiments are inevitable because of variations in many features, such as the techniques used, number and maturity of the subjects, methods of handling the data, and the like. More studies are needed in this area that will stand the test of rigorous scientific research, so far as that is possible in education.

QUESTIONS AND TOPICS FOR STUDY

1. What are the advantages of learning in a meaningful way? Describe instances of successful learning due to emphasis on meanings and learning with understanding.
2. How can learning in the modern school be made more meaningful?
3. Does organized learning have more application to some types of school learning than to others?
4. What is the relation of learning to problem solving?
5. Describe instances of failure to learn at school because of a mechanical, meaningless approach to learning.
6. Choose some skill-subject, or some skill learned outside of school, and show how meaning aids learning of the skill.
7. What relation do interest and incentives have to learning?
8. To what extent should provisions for incidental and indirect learning be emphasized in the modern school program? What are the limitations of incidental or spontaneous learning from the standpoint of school achievement?

- 9 What is meant by "transfer of training"? Under what circumstances is most "transfer" likely to take place?
- 10 What is the place of drill and practice in perfecting skill?
11. How can the concept of drill be reconciled with learning by understanding?
12. Write a summary of the chief facts about learning as applied to school work
- 13 Write a summary of the chapter
- 14 Write out five additional questions or study exercises based upon the chapter.

REFERENCES

- 1 Barton, J W "Comprehensive Units in Learning Typewriting" *Psychological Monographs*, 1926, 35, No. 164
- 2 Bode, Boyd H *How We Learn* Boston D C Heath & Co 1940
- 3 Brownell, William A *Development of Children's Number Ideas in the Primary Grades* Supplementary Educational Monographs, No 35 Chicago University of Chicago Press 1928
- 4 Brownell, William A Kuehner, Kenneth G and Rein, William C. *Learning as Reorganization* Research Studies in Education, No 3, Durham, N C Duke University Press, 1939
- 5 Carroll, Herbert A *Generalization of Bright and Dull Children with Special Reference to Spelling* Teachers College Contribution to Education No 439 New York Teachers College, Columbia University 1930
- 6 Clark Mildred and Worcester, D A "A Comparison of the Results Obtained from the Teaching of Shorthand by the Word Unit Method and the Sentence Unit Method" *Journal of Educational Psychology*, 1932, 23, 123-131
- 7 Cook, Thomas W "Amount of Material and Difficulty of Problem Solving II The Disc Transfer Problem." *Journal of Experimental Psychology*, 1937, 20, 288-296
- 8 Dashiell, John F *The Scientific Movement in Education* 37th Yearbook of the National Society for the Study of Education II, pp 393-404 Bloomington, Ill., Public School Publishing Co., 1938
- 9 Decroly, Ovide, "Le principe de la globalisation appliqué à l'éducation du langage parlé et écrit" *Archives de Psychologie* 1927, 20 324-346
- 10 Dewey, John *How We Think* Boston D C Heath & Co, 1910
- 11 Dewey, John *Interest and Effort in Education* Boston Houghton Mifflin Co., 1913
- 12 Dunlap, Knight "A Revision of the Fundamental Law of Habit Formation" *Science*, 1928, 67, 360-362.
- 13 Gates, Arthur I, Jersild, Arthur T, McConnell T R, and Chaffman, Robert. *Educational Psychology* New York The Macmillan Co, 1942. (Chapters 9-12)
- 14 Goodwin, J., Long, Louis and Welch, Livingston. "Generalization in Memory" *Journal of Experimental Psychology*, 1945 35, 71-75
- 15 Grinstead, Wren J "An Experiment in the Learning of Foreign Words" *Journal of Educational Psychology*, 1915, 6, 242-245
- 16 Guilford, Joy P "The Role of Form in Learning" *Journal of Experimental Psychology* 1927, 10, 415-423
- 17 Hartman, George W "The Role of Insight in the Learning of Logical Relations" *American Journal of Psychology*, 1937, 49, 287-292.

- 18 Hildreth Gertrude "Puzzle Solving With and Without Understanding" *Journal of Educational Psychology* 1942 33 595-604
- 19 Katona George. "On Different Forms of Learning by Reading" *Journal of Educational Psychology* 1942, 33 335-355
- 20 Katona George. *Organizing and Memorizing* New York Columbia University Press 1940
- 21 Langer W. C. The Role of Organization in the Learning of a Sensorimotor Task *Journal of Psychology* 1936 2 317-325
- 22 Lee J. Murray and Lee Doris *The Child and His Curriculum* New York D. Appleton Century Co., Inc., 1940
- 23 McConnell T. R. *Discovery vs. Authoritative Identification in the Learning of Children* University of Iowa Studies in Education 1934 9 No 5
- 24 Long Louis and Welch Livingston. "Reasoning Ability in Young Children." *Journal of Psychology* 1941, 12 21-44
- 25 McGeech Grace O. "The Intelligence Quotient as a Factor in the Whole-Part Problem" *Journal of Experimental Psychology* 1931 14 333-358
- 26 McGeech, John A. *The Psychology of Human Learning, An Introduction* N. Y. Longmans Green & Co. Inc. 1942
- 27 Peterson Joseph. "Experiments in Rational Learning" *Psychological Review* 1918, 25 443-467
- 28 Peterson Joseph "Learning in Children" Chapter 10 in *Handbook of Child Psychology* (C. Murchison ed.) Worcester, Mass. Clark University Press, 1933
- 29 Reed Homer B. "Meaning as a Factor in Learning" *Journal of Educational Psychology* 1938 29, 419-430
- 30 Rubin Rabson Grace. "Studies in the Psychology of Memorizing Piano Music." *Journal of Educational Psychology* 1940 31 460-476
- 31 Seagoe May V. "Qualitative Wholes: a Revaluation of the Whole Part Problem" *Journal of Educational Psychology*, 1936, 27, 537-545, "Qualitative Wholes Classroom Experiments," *Ibid* 612-620
- 32 Swenson Esther J. "Generalization and Organization as Factors in Transfer and Retroactive Inhibition." *Proceedings of the Indiana Academy of Science* 1942, 51 248-255
- 33 Stroud, James B. "Experiments on Learning in School Situations" *Psychological Bulletin* 1940 37, 777-807
- 34 Thiele, Carl L. *The Contribution of Generalization to the Learning of the Addition Facts* Contributions to Education No 763 New York Teachers College, Columbia University 1938
- 35 Woodworth Robert S. *Experimental Psychology* New York Henry Holt & Co., Inc., 1938.
- 36 Woodworth, Robert S. *Contemporary Schools of Psychology* New York The Ronald Press Co., 1931
- 37 *The Psychology of Learning* Forty First Yearbook of the National Society for the Study of Education Part II Bloomington, Ill. Public School Publishing Co., 1942.

Chapter 4

PSYCHOLOGICAL FOUNDATIONS OF UNIFIED LEARNING

II PRINCIPLES OF CHILD DEVELOPMENT

Since the school is concerned primarily with the behavioral growth of children, the more teachers know about normal growth tendencies the more successful their efforts should be. The best results are obtained when teachers and parents work in harmony with these growth principles instead of running counter to natural tendencies in childhood. In this chapter a number of developmental growth principles will be delineated and their significance for unified learning pointed out. The experimental evidence on which these principles are based will be found in the references at the end of the chapter.

Life and Growth as Coextensive Processes

The living organism, whether human or lower animal, is always a changing organism, consequently the life process itself implies growth and development. The philosopher Bergson compared life from its inception to an onrushing river, observing, "To live is to change, to change is to mature." Child growth is a continuous sequential process that carries the individual by progressive stages toward maturity. All subsequent development is built upon previous growth.

The learning process begins not at age six, the customary legal school entrance age, but more properly with the first infant feeding experiences, the first reaction to sound, light, smells, and to people in the home circle. Early training lays the foundation for behavior in the later school years. A six-year-old's behavior goes on into high school, the youth's traits are observed later in the adult. Behavior in adulthood has its roots deep in the past.

Plasticity and Modifiability of Behavior in Childhood.—Nature has endowed the child mind with the plasticity to receive and retain all sorts of impressions. The pliability of behavior in infancy and

childhood has been pointed out as the essential difference between man and the lower animals. Animals act instinctively, they respond in terms of narrow, fixed, rigid behavior patterns, whereas the child's behavior is susceptible to modification, even into adulthood. As Dr. Arnold Gesell has pointed out, the child is born with certain dispositions and potentialities which undergo progressive organization from the moment of birth.

It is the undeveloped character of the nervous system in infancy, the lack of fixed habits in early childhood, the vast potentialities of the human mind for learning new behavior responses that make education possible. Childhood and youth are formative periods, fertile soil for new impressions, the time for acquiring habits, skills, attitudes, and ideas. Modes of behavior learned in early childhood do not necessarily become stamped in for all time, they are in turn modified through new experiences and insights.

The psycho-physical organism supplies the motive power for all early childhood learning. As Coleman Griffith (12) suggests

No child has to learn how to develop plasticity or to develop this feature of his nervous system. It's an inherent part of him. No child has to learn how to learn the natural lessons his environment presents. This is a part of his equipment. He would not be living if he didn't have it. He has to learn how to learn at school often because this learning is so unnatural for him. Learning is an expression of growth.

Stages in Growth

Everyone can observe stages of growth taking place in children from infancy to adulthood. The landmarks of growth are particularly striking in the early childhood years as the child begins to walk and talk, later around five and six years when he is mature enough to enter school, and again at adolescence. These changes do not come about abruptly, on the contrary they are the culmination of long periods of slow, almost imperceptible growth changes that seem quite insignificant from day to day in the child's life. Growth is an orderly process characterized by a sequentially organized chain of events, one step leading to the next and, in fact, serving as preparation for the next stage in growth. This has been demonstrated in locomotion, language development, and in growth in perceptual abilities. Attempting to telescope these growth stages, to hurry the child through them in an effort to accelerate his learning, is usually time wasting if not injurious. Each successive experience seems to be needed for building more mature concepts, a process that takes time. The child

grows up step by step, not by sudden strides. Progress takes place continuously. There is always a connection between what has gone before and what is to follow. One implication of this truth is that the child must live a child's life before he is ready to move forward to the next stage in growth. To live fully the life of the child is the best preparation for adulthood.

Rousseau enunciated a principle teachers would do well to follow: that childhood should be given time to ripen, instead of artificially forcing intellectual growth. Education has no higher function than to help children live to the fullest extent the natural life of a child.

The Role of Maturation in Development

Physical and mental development in childhood has been likened to a tree in its growth. The child does his own growing under the impetus of powerful maturation forces. The child's early learning takes place without conscious effort on the child's part. The changes that take place are the combined result of internal urges and favorable environmental conditions which transform the random, unorganized ineffectual responses of infancy into the smooth performance, the controlled integrated behavior of later childhood and adulthood. Ways of behaving are learned as the individual's daily needs are met. Through the process of growing up the child is able to learn tasks of increasing complexity.

All the basic skills of early childhood are learned on the child's own initiative. Adaptive behavior—learning to walk, eat, talk to make social adjustments—are readily learned through incidental experience because of their survival value. This learning takes place in time governed by the rate at which the child matures and the complexity of the skills acquired.

Active participation in social experiences that stimulate a child to think, talk, work, and play because they are experiences that are co-extensive with his own life affords all the necessary motivation to *learning in early childhood*. The genetic concept of learning implies that the child is by nature an investigator, curious to examine, to experiment to apprehend new experiences.

As the child matures thoughtful observation replaces random muscular activity. The individual substitutes ideas for overt behavior, finding this the more efficient way to learn.

The human organism tends to show resistance to stimuli that are not harmonious with its developmental needs. Chance environmental circumstances during the early years of childhood have relatively

little influence on the emergence of basic psychological traits and capacities. Forces within the organism indicate the potentialities of growth and at the same time set limits to progress in development.

A simple environment appears to satisfy the child's growth needs in the early stages even better than a more complex background. Differences in local cultures appear to make little difference in these fundamental growth trends because the organism is concerned with gross and fundamental adjustments, not with the refinements that come later.

The organism appears to assimilate the environment in terms of its own needs and capacities for assimilation. These needs are dictated by the psycho-organic forces that direct and control growth. The external world may, in fact, be assimilated only under urge of these maturation forces. Maturation has been called "the teacher who does half the work and asks no pay." The child is sometimes his own best teacher.

Growth as a Process of Refinement and Specialization

Every normal individual has potentialities for achieving highly specialized types of behavior, e.g. to speak German or to write script, or to develop a highly trained musical ear, but at birth and during the early years, or as long as the child remains untrained, the individual's behavior is diffuse and unspecialized.

Child growth in many phases does not take place by simple addition of one behavior pattern to another, but by complete transformation of the original pattern. In early childhood all the potentialities for development are present, but the accessories and finer distinctions have yet to appear through evolutionary unfoldment of the mental life. Integration of behavior is normally preserved from first to last; the addition of new behavior tendencies does not cause breakdown in the old, but rather an increasing all-over refinement, differentiation, and specialization with greater maturity. This rule holds for all growth in nature. The evolutionary process with respect to visual perception has been verified in research studies (15). It is obvious to any parent or teacher who has noticed the child's developing specialization in such a trait as handedness.

As a rule, children in general show more uniformity in development during early childhood than they do later when widely differing environmental factors come to play a larger part in influencing the course of development.

Individuality

Although general growth trends for the child population as a whole can be pointed out no two children mature according to precisely the same pattern. Individuality is a distinct characteristic of growth at all age levels and among all races. Individual differences are found among children of the same age in such traits as ability to learn, physical growth, emotional and social maturity, and personality. They are produced by complex factors that stem from both heredity and environment. Every teacher observes these variations among pupils of the same class, some of which appear to be an integral part of the individual, others temporary and remediable. Johann Friedrich Herbart pointed out many years ago that educability was governed to some extent by the child's individuality. Some children show variations from the generality of the child population that constitute limitations or handicaps in learning; others show favorable variations which mark them as superior in learning capacity or in other growth traits. These are stubborn facts that complicate the learning process at school. Good teaching capitalizes these differences and shows an understanding of them through adjustments in the school program and methods. More consideration is given to this topic in Chapter 22.

Interrelation of Maturation and Environment Forces

Growth is the product of the interaction between the organism and its environment. This interaction is too complex to permit an evaluation of the relative importance of either force in child development. A child's resemblance to his parents depends upon both biological inheritance and environmental influences. A child's acquired behavior reflects both innate maturation drives as well as stimulation from cultural factors in the environment and the training he is given.

Although in the early years maturation forces appear to be pre-eminent, through the years environmental influences determine at many points the direction and character of the child's development. Social factors in child training become more important with each passing year. Maturation determines the general pattern of growth and the rate at which a child passes from one stage to the next, but environmental influences and direct teaching determine the particular forms of growth the individual achieves. All normal children, for example, pass through a common series of stages in learning lan-

guage, but whether the language learned is English, Swedish, or Chinese depends entirely upon environmental factors operating through direct or indirect teaching. All normal children are capable of becoming polite, responding affably in social situations, but the particular manners they acquire, bowing, hand shaking and the like, depend upon training. Whether the child grows to be tall and strong or remains weak and small depends upon the food supply which is an environmental circumstance, as well as upon hereditary factors.

Social and Cultural Experiences Influence Child Development

Child growth normally takes place in a social setting. It is through contacts with other children and adults that the child learns about his world and is enabled to mature socially. The family is the chief social unit which influences a child's behavior throughout his growth period, setting definite culture patterns to which the child is expected to conform.

From his researches, Jean Piaget, the Swiss educator, concluded that social life is necessary to rational development, without it the child would never succeed in understanding the reciprocity of viewpoints. Experience enables him to gain perspective. A child's social contacts at school gradually teach him that he inhabits a social world in which he is an integral part, not the center of things he thought himself as a small child. His individual and egocentric point of view becomes modified by the viewpoints of others with whom he associates (31).

Action, the Child's Typical Behavior Trait

Action, not abstract thinking, passivity, or reflection, is the growing child's predominant behavior trait. Action serves the requirements of the child's rapidly developing nervous and muscular system, through bodily activity the child gains control and poise in motor skills. Furthermore action brings the child into contact with his environment, enabling him to perceive phenomena providing his mind with material to work on and think about. Action and thinking are allied, in fact muscular activity is actually an aid in concept building. The child's self activity is his special vehicle for attaining normal, wholesome growth. As Rousseau observed, bodily activity does not hinder the working of the mind, one is merely the expression of the other. Learning for the child is as much a bodily function as a mental process.

The child expresses his thinking in motor activity, in fact, thinking for him is impossible without motor impulses. As Piaget indicated, childish thought is motor rather than conceptual—images and motor schemas play a much larger part than conceptual thought such as could be formulated in words in the life of the young child (32). Childish thought is synonymous with childish activity. To restrain the motor response would be virtually to block the child's thinking. Children develop their minds and personalities through manipulation and exploration of objects and materials in their environment.

No normal child sits on the sidelines waiting for experiences to come to him. Instead, in all his working hours he is animated by purposes that prompt him to active participation in the life that goes on about him regardless of whether he is cradle size or 'teen age.

Corinne Seeds (33), in an attempt to determine the nature of children's spontaneous activities, observed children aged eight to eleven, 54 girls and 55 boys for a full day's activities out of school. These children engaged in an extraordinary amount of strenuous physical activity—thrilling dramatic play, construction activities satisfying curiosity by experimentation, reading and asking questions, sharing experiences and communicating with each other, expressing thoughts and feelings aesthetically.

The brain and nervous system are designed for action, not, as is commonly supposed, for storing up facts or passive reflection. Storing up facts may be considered merely a by-product of action.

As the result of extensive research work on the nervous system in man, the neurologist Dr. Charles Sherrington (34) made the following statement:

I may seem to stress the preoccupation of brain with muscle. Can we stress too much that preoccupation when any path we trace in the brain leads directly or indirectly to muscle? The brain seems a thoroughfare for nerve action passing on its way to the motor animal. It has been remarked that life's aim is an act not a thought.

The Function of Play in Child Development

Play is expression of the child's mental life. It is his way of learning through experimenting with his environment. Organization and problem solving in play are correlated with mental development. In the early years, spontaneous play is the child's own way of self-education, since through play he learns skills, learns to use his environment purposefully, and works with the impression he receives imaginatively and creatively.

Play unquestionably has many functions. In some cases it may represent sheer exuberance or blowing off steam. Imaginative play may serve as an escape from reality, a means of vicarious experience. But no matter what the form, through play the child gains experiences and does the thinking that he applies to problem solving. His insights grow out of his knowledge and experience gained through play. Through play a child learns more than in any other way. He uses his body vigorously, thinks clearly and well in working out his problems, and is happily engaged in situations of his own planning.

Even in the later years of childhood, games and dramatic play have a unique role in giving the child skill and background.

The teacher who capitalizes the child's delight in spontaneous play will discover here a powerful motive power to learning. The child's play will also reveal to teachers his genuine concerns and interests, as well as his needs and problems.

The Significance of the Interests and Concerns of Children for Development

It is generally agreed that school experiences should take into account the interests and needs of children. The reason is that interests and needs as expressed in children's behavior give clues to readiness for learning and suggest the types of school experiences from which children will benefit the most. Here lies the key to motivation in learning.

The things about which children show interest and concern at any age level reflect the combined influences of biological growth urges and environmental factors. The changes evident in these concerns and interests as children mature are attributable to mental and physical changes that are taking place as the result of biological factors and social pressure, as well as direct teaching. A child may be interested in playing with dolls, playing tag, collecting milk bottle caps, or studying mathematical principles because these interests are congenial with the stage of physical and mental maturation he has reached. He likes to cuddle soft toys, romp and play outdoors, play group games, write poetry, read adventure stories, or have dates with members of the opposite sex because he is biologically ready for these particular activities at a certain age.

At the same time, the particular form of expression his interests take may be largely due to aspects of his home and school life or his community background. Even the youngest children today, compared with those a generation ago, reflect in their interests and con-

cerns the influences of urban life and technological developments in our modern culture. Whether a child prefers to play with dolls resembling American or Chinese children, to play baseball rather than cricket, or to collect bottle caps rather than shells is largely due to the culture in which he is maturing.

These facts suggest that the role of the school is not solely to make adaptations of the curriculum to children's expressed interests but to direct the child's interests and concerns toward desirable goals. A matter about which a child may well be concerned and in which he is mature enough to take interest—for example, writing more legibly—may need to be brought to his attention. School experiences should be planned not only to satisfy children's personal needs but in terms of the inevitable social demands he must meet.

Readiness for Learning an Aspect of Development

The concept of readiness for learning suggests that because of having attained a certain stage in development the child is more ready to learn new habits, skills, or concepts than he has been up to this point. Before this time effort to learn would tend to result in failure. The principle of readiness applies to such diverse accomplishments as walking, talking, and dressing one's self in early childhood, also learning to read, to write, to pay attention, to acquire good manners, and to master mathematical principles.

This principle explains why children do not invariably succeed in learning a lesson the teacher attempts to impart. The reason may be not lack of attention or wilful resistance but lack of mental readiness. Premature instruction is either not assimilated or is wrongly assimilated. In the meanwhile the learner may have gained unfavorable attitudes toward learning.

Parents and teachers sometimes make the mistake of demanding that the child use formal reasoning processes in learning before he has had time to gain the experience that would prepare him for more mature stages of abstract reasoning. Drill in skills, the teaching of facts and principles before children have demonstrated readiness for learning, results in artificial pacing that disregards the child's normal rate of development and seeks to telescope natural growth stages, all of which may be futile and in the end actually retard progress.

Growth in the Thinking Processes During Childhood

What are the laws of childish thought? asked Bronson Alcott as he pondered educational problems in his study a hundred years

ago Long years elapsed before the scientific child study movement advanced far enough to provide objective answers to this question which is so pertinent to childhood education The answers have been derived in the present century largely through the work of G Stanley Hall, J Mark Baldwin, William Stern, Jean Piaget, and other child psychologists

Piaget attempted to determine the laws by which the idea of reality develops between the ages of three and eleven His major contribution has been to outline the evolutionary stages in childish thought the stages in reasoning through which the child passes from infancy to adolescence, and to indicate the role of social forces in the process

The experiments of Piaget and others prove that children interpret impressions in terms of their own experience and developmental level The young child's concepts of time and space, of physical causality, are immature compared with the older child's and adult's concepts The child's capacity to reason logically about cause and event is in direct proportion to his developmental level According to Piaget, ability to reason systematically develops very gradually throughout childhood, passing from primitive to logical modes of thought by several transition stages not sharply distinguishable from each other Development in the thought processes begins very early, progresses slowly, and remains uncompleted at the close of childhood Some individuals never do reach full maturity in logical reasoning The transition from one stage to another is a natural process in childhood

Piaget found a remarkable continuity between the most primitive explanations given by young children and those who were more advanced in their thinking The successive stages are closely akin to one another Almost imperceptibly the explanations given developed with the mental stature of the child

The stages of evolution in childish thought appear to be quite universal, little affected by differences in culture, a part and parcel of the child's developing organism interacting with a stimulating world about him

Until the age of seven or eight, children had difficulty solving problems on a verbal basis They succeeded better with problem-solving if they could manipulate objects Not until the age of eleven or twelve did the children attain much facility with reasoning in verbal terms The age of eleven or twelve marks for most children something of a dividing line in mental development for it is at this point that the child attains a new stage in thinking, the capacity for better logical reasoning

Studies in the psychology of reasoning show that it is difficult for children to deal with non-objective phenomena. Even adults tend to prefer the objective percept to the abstract concept. Abstractions which are built from funded experiences come relatively late in the developmental span. Before concepts are formed experiences must have been repeated over and over. Experiences are basic to the development of concepts, to generalizing and understanding. The pupil of any age needs constantly to refer back to his actual experiences, at the same time he requires new ones to extend and enlarge his thinking.

Piaget found that childish assertions running counter to adult logic were entirely appropriate for the child. He concluded that moving from one plane of childish thought to another was something no teacher could teach since this is a developmental process and he stated that 'artificialism in childish thought rests on tendencies of mind that no observation of things will eclipse until precisely such time as the child is ready to abandon all its preoccupations.'

Modes of thought mature as the child grows and broadens his experience almost irrespective of formal instruction or radical influences in home training. The child takes a circuitous route in arriving at his ultimate understanding, but no external pressure seems to shortcut the process. Piaget concluded that the child attains the higher forms of causality spontaneously by virtue of growing up.

Psychological Assimilation

Psychological assimilation refers to the ways in which an individual responds mentally to the impressions he receives. There is a parallel between psychological and physiological assimilation. The latter depends both upon what is eaten and the capacity of the organism for assimilation, the condition of the digestive tract, and other physiological factors. Similarly the characteristics of the mind as well as the nature of the stimuli—in the case of school children, the teaching content and methods—determine how well children assimilate their lessons.

The principle of apperception was formulated by Herbart and elaborated by his followers. According to this principle a person's mental responses are influenced by his experience and background, environmental factors determine what presentations the mind receives and also their manner of combining into higher mental processes. Acquisitions of new experience are affected by those already gained. Piaget's data prove that children can assimilate new impressions only in accordance with the maturation level they have reached in think-

ing Children learn and absorb only what they are mature enough to understand They understand certain things easily in a childlike way, simply because they are children with unripe minds The child mind does not apprehend and assimilate the external environment as the adult knows and understands it, but according to his own mental schemas, and in terms of his background and experiences (32)

When a learning task is beyond his mental grasp he tends to reduce it to his level or choose his own learning methods Many errors in perception are attributable to immature or inadequate mental assimilation Distortions in mental assimilation of problems beyond their grasp presented to children have been reported elsewhere (16)

A general tendency when the child is confronted with a new and complicated situation is not to turn away from it, but to modify and simplify the problem to suit his mentality The results may be rated "wrong" according to adult standards

A stereopticon lecturer, showing science pictures to seven- and eight year olds in a school auditorium, tapped with a stick each time to signal that his assistant should change the picture At the conclusion of his lecture he asked "Now are there any questions about what you've seen and heard?" One little fellow replied, "Yes How did you make that noise?"

According to Piaget, children conclude, from seeing in their textbooks the saucepan demonstration of water vapor and steam that clouds in the sky come from the water that is heated in the saucepan "Clouds are produced from saucepans," is the natural inference

In a lesson on vitamins and diet which an instructor gave to elementary school children, using white rats which were weighed during the demonstration lesson, all that one child gained from the demonstration and discussion was the method of weighing the rats The chief point, that deficient diet affects growth adversely escaped him entirely Just as the indigestible part of a shellfish must be discarded uneaten, so the child's mind rejects the non assimilable parts of his formal lessons or the incidental problems that confront him in everyday life Reducing the problem to his own conceptual level seems to enable the child to maintain his mental equilibrium

These facts about psychological assimilation help to explain why the "tall" stories children delight in telling, especially from age five on conflict with the adult's notion of truth The child is telling things as they impress him or as he sees them with his childish eye

The facts that Piaget and others have discovered about children's thought processes help us to understand why teaching that disregards the child's level of reasoning and thinking may fail The teacher's

attempt to make children reason too soon may retard rather than promote the child's development in thinking. School failures pile up when intellectual demands beyond their understanding are made of children. Forcing the pupil beyond his level of insight tends to throw him back on low level performance. More will be learned when young children are permitted to work with simple things experimentally than when given elaborate formal lessons in abstract terms.

The Emergence of Personality

An individual's personality and character reflect the habits he has formed as a result of adjustments he has made in satisfying his basic needs and goals. This framework is laid down early in life. During the growth process personality traits gradually stand out in bolder relief until adulthood is fully attained, the time at which the person's character is considered to be fully formed. Even in late life the dominant traits established in the early years are revealed in an individual's behavior.

Behavior reflects the dynamic structure of an individual's personality. It is motivated by functional needs represented in a limited number of powerful drives: chiefly the desire for physical comfort and security, for feelings of adequacy in daily life situations, and the passions: love, hate, fear. These few basic drives are mainly responsible for all the complex behavior patterns that characterize the typical individual. In order to develop a wholesome personality and normal adjustments to life these basic urges, although subject to modification through experience, need to be satisfied.

It is through social interaction, stemming from the first intimate relationships with his parents in the home circle, that a child's personality and character traits are built. In these early, primitive social contacts, emotional responses are called forth which tend to dominate the child's adjustment patterns throughout the childhood years.

Emotional responses represent primitive behavior in response to the need of the organism for comfort and satisfaction, or adjustment to dangers that threaten security. They are energizing mechanisms that put the organism on the alert. Through growth, as the result of learning, these emotional responses become sublimated or transferred to situations not originally emotionally stimulating. Normal emotional development shows sequential growth trends paralleling intellectual development in children.

The implications of these developmental principles for organizing children's school experiences will be discussed in subsequent chapters.

QUESTIONS AND TOPICS FOR STUDY

1. What are some of the basic facts of child development with which every teacher should become acquainted?
2. Why should teachers be familiar with the developmental traits of children in a wide age range, e g , 4-14, rather than a single grade level of narrow age range?
3. Describe typical behavior traits of children in a particular age range: e g ages 5-6, 9 12, 14-16 and show how they illustrate the developmental principles described here
4. Illustrate from actually observing the behavior of children three of the principles outlined in this chapter
5. Attempt to discover from actually studying the behavior of a group of children aged 6, 9, 12, or 14, interests and concerns that reflect biological urges of the organism
6. List several interests shown by 12-year-old boys and girls, indicating the extent to which these interests reflect the influence of specific environmental factors
7. What are the emotional needs of children that are of concern to classroom teachers?
8. Are some behavior traits more subject to school training than others? Which ones?
9. What are some of the implications of the principles listed here for teaching and learning at school in the kindergarten? The elementary school? The junior or senior high school?
10. When do children begin to reason? What evidence helps you to answer the question?
11. Cite an instance in which a school lesson was lost on the children because it was "over their heads"
12. Prepare a summary of the chapter
13. Prepare five additional questions or study exercises based on the chapter.

REFERENCES

1. Barker, Roger G., Kounin, Jacob S., and Wright, Herbert F., eds *Child Behavior and Development* New York McGraw Hill Book Co., Inc., 1943
2. Biber, Barbara, et al *Child Life in School, a Study of a Seven Year Old Group* New York E. P. Dutton & Co., Inc., 1942.
3. Bowley, Agatha H. *Guiding the Normal Child* New York Philosophical Library, Inc., 1943
4. Boynton Paul L. *The Psychology of Child Development* Minneapolis Educational Publishers, 1938
5. Breckenridge, Marian E. and Vincent, E. Lee *Child Development, Physical and Psychological Growth through the School Years* Philadelphia W B Saunders Co., 1943
6. Bruce William F. and Freeman, Frank S. *Development and Learning The Psychology of Childhood and Youth in a Democratic Society* Boston Houghton Mifflin Co., 1942

- 7 Curti, Margaret W *Child Psychology* New York Longmans, Green & Co. Inc., 1938
8. Doll Edgar A *Vineland Social Maturity Scale* Vineland N J The Training School 1941
- 9 Gesell, Arnold and Ilg Frances L. *The Child From Five to Ten* New York Harper & Bros 1946
- 10 Gesell Arnold and Ilg Frances L. *Infant and Child in the Culture of Today* New York Harper & Bros., 1943
- 11 Gesell Arnold. *The Mental Growth of the Preschool Child* New York The Macmillan Co., 1938
12. Griffith, Coleman. *An Introduction to Educational Psychology* New York Farrar and Rinehart, 1935
- 13 Hazlitt Victoria "Children's Thinking" *British Journal of Psychology*, 1930 20 354-361
- 14 Hartmann George W "Psychological Basis of Curriculum Development" *Curriculum Journal*, 1938, 9, 6-10
- 15 Hildreth, Gertrude H *The Child Mind in Evolution* New York King's Crown Press 1941
- 16 Hildreth Gertrude H 'The Difficulty Reduction Tendency in Perception and Problem Solving' *Journal of Educational Psychology* 1941 32 305 313
- 17 Hildreth Gertrude H 'Individual Differences' *Encyclopaedia of Educational Research* New York The Macmillan Co., 1940
18. Hubbard, Elizabeth V *Your Children at School, How They Adjust and Develop* New York John Day Co., Inc., 1942
- 19 Isaacs, Susan. *The Children We Teach* London University of London Press, 1932
- 20 Isaacs Susan *The Psychological Aspects of Child Development* London University of London, Institute of Education 1935
- 21 Isaacs Susan *Intellectual Growth in Young Children* London G Routledge & Sons, 1930
22. Jersild, Arthur T *Child Psychology* (rev.) New York Prentice-Hall, Inc., 1947
- 23 Jersild Arthur T., et al. *Child Development and the Curriculum* New York Bureau of Publications, Teachers College, Columbia University, 1946
- 24 Jersild, Arthur T and Fehلمان, Charlotte "Child Development and the Curriculum Some General Principles" *Journal of Experimental Education*, 1944, 12, 130 142
- 25 Lee, J Murray and Lee Doris *The Child and His Curriculum* New York D Appleton Century Co., Inc., 1940
- 26 Leonard, Edith M., Miles Lillian E. and Van der Kar, Catherine S *The Child at Home and School* New York American Book Co., 1942
- 27 Merry, Frieda K. and Merry, Ralph V *From Infancy to Adolescence* New York Harper & Bros, 1940.
- 28 Murphy, Gardner Murphy, Lois B, and Newcomb, Theodore M *Experimental Social Psychology* New York Harper & Bros, 1937 Part II
- 29 Olson, Willard C *The Bases for Activity Programs in Elementary Schools* School of Education Bulletin, University of Michigan 1937, 8 55-58.
- 30 Parker, Beryl "Children in the Middle School" *The National Elementary Principal* 1940 20 71 73
- 31 Piaget, Jean. *The Child's Conception of Physical Causality* New York Harcourt, Brace & Co., Inc., 1930
32. Piaget Jean *The Child's Conception of the World* New York Harcourt Brace & Co., Inc. 1929
33. Seeds, Corinne A "What Learning Experiences are Likely to Prove Developmental During Later Childhood?" *California Journal of Elementary Education* 1941, 10, 41 55

- 34 Sherrington Charles *Selected Writings* New York Paul B Hoeber, Inc Medical Bk. Dept. of Harper & Bros 1940
- 35 Strang Ruth *An Introduction to Child Study* New York The Macmillan Co, 1938
- 36 Witty Paul and Lehman Harvey C *The Psychology of Play Activities* New York A S Barnes and Co Inc 1927
- 37 American Association of Teachers Colleges *Child Growth and Development Emphasis in Teacher Education* Oneonta N Y 1944
- 38 *Aspects of Child Growth and Development, A Study Guide for Teachers* Washington American Council on Education 1941
- 39 *Child Development Chart from Birth to 21 Years* Hartford Conn Connecticut State Department of Health 1943
- 40 *Child Development and the Curriculum Thirty Eighth Yearbook of the National Society for the Study of Education Part I* Bloomington Ill Public School Publishing Co 1939
- 41 *Child Development and the Psychology of Learning A Report of the Committee on Learning of the Commission on Teachers Education of the American Council on Education* Washington 1941
- 42 *Course of Study for Virginia Elementary Schools Grades I VII* Richmond State Department of Public Instruction 1943
- 43 *How Children Develop* Faculty of the University School Adventures in Education University School Series No 3 Columbus Ohio College of Education Ohio State University 1946
- 44 Staff of the Division of Child Development American Council on Education *Helping Teachers Understand Children* Washington American Council on Education 1945

Chapter 5

FEATURES OF UNIFIED METHODS IN SCHOOL PRACTICES

The changes that take place when organized learning supplants conventional methods were outlined briefly in Chapter 2. In this chapter, and others that follow, these features of modern school practice will be more fully described.

Actual evidence supporting statements presented here will be found in references in the various sections in the reading list at the end of this chapter, in Chapter 24, and in other chapters specifically referred to.

Realistic Problem Solving

School experiences traditionally have been remote from reality. The good school today seeks to orient the child in problem-solving relating school experiences to real life situations. The children's own problems arising every day as they pursue their purposes constitute the basis for school activities. Learning becomes identified with problem solving. A relationship is established between what children do in school and their problems in daily living. Individual problem solving is such an important aspect of everyday living that children need to practice it continually at school. Live problems are found to have the most meaning for children and to hold the most fruitful possibilities for learning because they challenge thinking and require learning with understanding.

In their school activities children identify their problems in daily living, they help to plan the experiences and carry forward the plan through which they learn to deal with these problems. School experiences center about such aspects of child life as health, food habits, planning the use of time, spending money, conserving property, repairing equipment, working in the community, getting along with people, understanding social and economic factors in daily life (see references at the end of this chapter).

As they participate in lifelike projects, the children discover the causes and purposes of things. In dealing with problems realistically, they respond actively, exercising initiative, using judgment, planning, weighing alternatives, applying previous experience, attaining new understanding as they work. Such school learnings carry over to life outside, at home and in the community. Geography and even algebra can be related to practical, everyday affairs. In turn, affairs outside of school come into the classroom for study.

The interests aroused at school carry over to leisure hours at home. Children attending a school which offered a rich program that utilized their creative abilities told their teachers they scarcely had time to listen to the radio at home because they preferred to work on their school originated projects.

Learning at First Hand

There is no good substitute for firsthand learning of anything. It is the best foundation for the school curriculum. To learn something, in the fullest sense of the term, the child needs to experience the thing from every possible angle, for example: ounces and pounds in arithmetic, or the meaning of "thrift."

For children, understanding begins with sensory experiences (chiefly visual and auditory), with active perceiving of things and processes, and with immediate contact with the "here and now." Conceptual thinking, required in dealing with the abstractions of number and language which play such a large part in later learning, depends upon a rich background of actual experience.

Concreteness makes impressions vivid and lasting. Furthermore, working with materials satisfies the child's natural desire to manipulate, explore, and experiment with materials, teaching the use rather than the abuse of materials.

Learning through experience means making firsthand observations, working purposefully with real materials, constructing and creating things, trying out results through functional tests.

Concrete learning involves working with the hands: making a vegetable garden, giving a puppet show, caring for pets, making books. Older children have experiments with actual materials in school shops and laboratories. Upper graders make plastics or soap, cook food, or experiment with physical and chemical analyses in connection with their studies. Concrete learning acquaints children with the operation of things and their sources, with people (what

they do, what they need and feel) and prepares the pupils to undertake socially useful work.

Learning through experiences, since it involves doing things, is very different from textbook study, which centers on committing printed statements to heart. Doing a practical project in electrical wiring gives a pupil more exact knowledge of an electric circuit than he could obtain from merely reading on the subject and studying diagrams, even better, it stimulates the pupil with much more zest for learning.

Contrast between Textbook Work and Experiential Learning

The contrast between formal textbook lessons and firsthand learning can be illustrated through examples. Consider the following illustration of a health lesson to prove to children the value of drinking milk daily. In study which is limited to reading a single textbook the pupils read selections stating that drinking milk daily is beneficial because milk contains food elements essential to healthy growth. Then they attempt to commit the statements to heart in order to recite when called on in class.

The same lesson through firsthand experiencing as taught in one school proceeded somewhat as follows: an experiment was set up in the classroom in which two guinea pigs originally weighing the same were fed different diets, one containing milk, the other lacking milk. The children fed and weighed the animals daily, keeping a graph that showed the comparative weights of the two animals over a period of time. In the end the pupils came to their own conclusions as to the effect of milk on diet. The vivid experiment resulted in more actual learning than reading about diet or textbook study alone could accomplish.

Here is another illustration. Textbook learning. The children read details of Pueblo Indian culture in the Southwest and the teacher told about Pueblo life, illustrating the comments with a few pictures. In reciting what they had learned, they attempted to recall and use the statements of the text.

Learning at first hand. the children saw a collection of Pueblo Indian materials, a member of the tribe came to describe their life and customs, and the children after seeing a moving picture showing tribal feasts and ceremonial dances, set up a pueblo in the classroom and dramatized the life of the natives. While carrying on these

activities, the children said they felt almost as though they themselves were the Indians

Children who learn to work with their hands during the early years tend to become proficient in manual skills, dextrous and competent in working with the materials of their environment. Bookish education and city living conditions have left children short in acquiring these dexterities. For the rural child, firsthand learning has more value than any other kind. In fact, any other approach tends to leave the rural child unfitted for life.

Firsthand experiencing is more readily adjusted to the physical needs of growing children than the conventional or book study program, for it fits in better with the natural rhythm of work, play, and rest in the child's day.

Learning through firsthand experience appears to be the key to readiness, for it insures learning with understanding which lays the best foundation for the following sequential steps.

Another advantage is that the activities give pupils a chance to explore fields of knowledge and skill they may later want to follow vocationally.

In learning through experience, another kind of reading is done in contrast to book reading, that is, "reading" the situations that arise in one's experience, understanding, interpreting, and assimilating those experiences, putting the lessons learned to actual use. Features of the immediate environment—animals, plants, institutions, natural resources—are utilized by school children experimentally. Ideas and materials are related. Much of the learning that takes place is incidental or spontaneous, the indirect result of working with materials at first hand.

These facts suggest that all school learning should maintain a close tie with real materials for pupils to work with practically and constructively.

Variety of Learning Methods

Organized learning calls for the entire gamut of learning processes within the repertory of growing children. In their natural activities children learn through exploring, experimenting, questioning, communicating, reading, recording, researching, discussing, planning, investigating, studying, through practicing, playing, thinking, listening, working, devising, creating, proving, criticising, estimating, pretending, and imagining, through singing, dancing, dramatizing, and building. In their out-of-school life children can be discovered every day working hard and learning on their own initiative.

through drawing, measuring, writing, and visiting places, and seeking out information from many sources

All these learning activities now come within the province of school-supervised education, even though not all of them can take place within the classroom walls

Children's Research Methods

Organized learning at school resembles the laboratory and workshop methods of science. Children raise questions, bring in materials, volunteer information. They learn how to locate the information they require in connection with their projects. They become acquainted with source materials, keep notebooks, collect clippings, make charts, draw up tables. They search for facts in books and bulletins, they use charts and maps in seeking answers to questions, not waiting for this information to be handed out to them by the teacher, nor limiting their study to a single textbook which may present a narrow range of facts and a limited viewpoint. Such a child is prepared to defend himself when his classmates inquire, "Where did you get the authority for that statement?"

In connection with their study of South America, pupils at the I. Lincoln School, New York (8) increased their skill in the following study techniques

1. Selecting the most important points from the information obtained
2. Contrasting the viewpoints of several different authorities
3. Using their own experiences in interpreting the information
4. Organizing the information they had gathered
5. Learning the value and use of maps, pictures, graphs as aids to understanding and interpreting printed materials
6. Making drawings, illustrations and graphs to use in imparting the knowledge gained to other members of the class or to school audiences

In such projects pupils develop skills which increase their power to formulate and carry out plans. This planning begins at an early age, even in kindergarten or first grade.

Scope for Pupil Initiative

The best kind of education, according to one high school boy's definition, is "the kind of training that helps the student think out problems for himself."

Today the school seeks to preserve the eager, curious attitude children show on entering school. The self-discovery element holds a central place in school studies, in contrast to traditional lesson learning in which the teacher discovered the problem for the pupil and dictated the nature of the desired response. When the problems originate with the pupils they tend, by that very fact, to be more meaningful.

There is more scope for pupil planning and cooperative achievement. The preparations teachers used to make for their pupils are now carried out by the pupils themselves. The good teacher does not supply all the materials and data for learning, but guides the pupil in finding, selecting, and organizing the materials his studies call for.

Instead of being asked merely to assimilate knowledge already accumulated, the better method is to help children learn how and where to find knowledge; not to think as the teacher dictates, or textbook states, but to reach conclusions for themselves. The child's mind is engaged in discovering the properties of things, and relationships among things and events.

Pupils gain increased power to make choices through being given a variety of experiences from which selection must be made and they learn to evaluate the choices they make under teacher guidance. Through exercising choice, they gain in self-direction.

The classroom becomes a place where students can express their ideas and opinions freely. The children enrich their own learning because they think of many things that would not occur to the teacher. In their planning they learn to work with minimum help from the teacher.

A freer, more stimulating environment is provided in which the child, through trying out things, can discover his own problems. This testing of his powers becomes a driving force toward self-achievement, and affords the child insight into his capacities.

The maturing child develops an attitude of objective inquiry, the ability to make critical, impartial appraisals of situations, the ability to attack problems independently using methods of scientific inquiry, the ability to think logically, to reach reasonable conclusions in the light of evidence, and to seek out information needed in solving a problem.

At this point experienced teachers may ask: Isn't there a saving of time in telling the pupil the things he needs to know instead of waiting for him to discover them for himself? The answer is that what the teacher attempts to tell the pupil may have little meaning for him; he may memorize what he is told without understanding,

or the result may be sheer verbalization that cannot be applied to real problem solving. The teacher who fails to capitalize the situations which require the child to ask questions and make discoveries for himself is missing the very opportunities that will teach the child to think for himself. Asking questions is a form of self-education.

Self-motivation

What a hollow sound 'motivation' has apart from the impetus to achievement supplied by a meaningful task! What a mistake it is to think that motivation is something that can be taught apart from purposeful action! The children themselves realize that they put forth more effort and work more consistently at any task when they have some purpose for learning. They resent being given blind tasks without seeing any objective in the assignment, and achieve less when they are forced to direct their energies toward remote and intangible goals. How quickly they learn under the sharp urgency of genuine need! Writing a letter for some definite purpose in connection with a project offers more incentive for improvement in spelling and composition than writing letters for the purpose of improving in letter writing. Reading a list of detached statements summarizing science facts seems a futile task in comparison with conducting some experiments from which scientific principles can be deduced.

Unification in Content and Skills

The shift from teaching many separate subjects in brief periods daily to a unified program with longer periods for uninterrupted work is consonant with the principles of organized learning. Through unification, conventional school subjects tend to become fused in larger units of experience which cut across traditional subject matter boundaries. In this way a more adequate program for living can be provided for children and youth. Teaching in terms of central themes derived from lifelike problems coordinating the wide range experiences of the children capitalizes the relatedness that the traditional subjects bear to each other, the learning that results is more profitable for the pupil and more economical of his time. Unified teaching gives coherence to the major activities that go on during the school day.

Subject teaching has been the prevailing pattern in American schools ever since pioneer days when the three R's constituted the curriculum. The 'common branches'—reading, arithmetic, spelling, writing, and geography, each with its separate text—had independent

status in the curriculum. Before long, as the school population grew and the graded system with its series of basic texts was introduced, more and more subjects were added until teachers found themselves giving instruction every day in a long list of skills and content subjects each occupying its specific time allotment in the daily schedule. For the most part, these subjects were taught in isolation from each other through lessons assigned in separate textbooks. The result was a segmented program which allowed little scope for organized learning or for lifelike learning experiences at school.

Even more specialization in teaching prevailed when departmentalization was introduced. In this scheme, instead of being assigned all the subjects for a group of children, a teacher was given one subject to teach throughout the grades, e.g. reading, history, writing, music, and so on. In some cases departmentalized teaching prevailed only in the upper grades where content subjects were introduced. On the other hand, some schools followed the departmentalized plan from the first grade.

It was inevitable that teachers should sense the futility of attempting to crowd ten or more different subjects into a short school day, and that the limitations of departmentalized work should soon be recognized.

Technological advance has rapidly stepped up the array of knowledge the well informed person must assimilate in order to keep abreast of the times. Every year sees more pressure on the overcrowded school schedule for the admission of new subject matter. The only means of accommodating all these new areas of knowledge in the school curriculum lies in achieving a unified program with a flexible program of activities and with the teacher largely free to plan and select. By this means the pupils gain breadth and variety of experience that go far beyond the possibilities in isolated subject teaching.

The unified program makes possible the introduction of such topics as "Pioneering days in our community," "Making a vegetable garden," "Foods we need for health," "The evolution of common things," "Architecture for today," "Life on the farm," and phases of intercultural education. In subject teaching it would be difficult to synthesize the materials from the many content and skill areas that are needed for the fullest development of these topics. Also, in the teaching of isolated subjects there would be insufficient time in the daily program for consecutive work on problems emerging from these units.

on "extras" Local conservation projects, stamp sales, Health Week, the election campaign, or Circus Week, can readily be fitted into the normal program

Subject Matter

All the conventional subject matter fields—the social studies, science, health, literature, music, the arts and crafts—are included in the school program as background for unit studies, or as phases of skill creative expression, and appreciation After the problems to be studied have been selected consideration is given to the contribution that the various subject matter areas can make to these studies Their selection depends in part upon the richness of content material that the unit requires Because of overlapping and integration of subject matter and skills no fixed allocation for "subjects" in the daily schedule need be rigidly followed

Expansion in the Program

The curriculum for unified learning has expanded to include broader areas of knowledge and information, many forms of expression, and a wide repertory of skills Expansion is possible because it is achieved through integration, rather than through the addition of separate courses

In subject teaching, the three R's tended to receive disproportionate emphasis In the unified program, the skill subjects tend to consume only the time needed for the children to acquire these skills for practical use The skills needing practice are learned more naturally and actually may be practiced more frequently For example, good language expression is stressed at all times, no matter what the content may be, and spelling is practiced whenever there is writing to be done

The newer curriculum does not pretend to cover everything formerly offered in subject matter courses through direct teaching Instead the child is shown how to work on his problems in order to gain those learnings that are most essential for him

Concomitant Learnings Through Unification

The unified program affords many opportunities for indirect learning while the pupil is focusing his attention on a central problem In the course of studying the rivers of America and their effect on agricultural and industrial prosperity of the nation a pupil may learn

much about the cities of America about population trends and early explorations At the same time he may make progress in learning arithmetic spelling and composition as well as gain skill in the arts and crafts The spread of learning in unit studies can be very great

A study of transportation would increase a pupil's knowledge and enlarge his concepts in the subject areas of history geography economics civics science and almost every conceivable skill the school child needs to master

Dealing with practical problems related to every day living can be more successful in forming attitudes and shaping character than the study of textbook abstractions alone

The Daily Schedule for Unified Learning.—Two major changes have taken place in daily scheduling to provide for the necessary planning and development of unit studies These are first longer periods of time for activities related to the enterprises undertaken and second flexibility to provide for developments and alterations in plans as new ideas emerge

The longer time span for consecutive work on enterprises at school with total school time broken into relatively few parts proves to be a major advantage of the unified program

Illustration of the daily schedule and program for unified teaching will be found in Chapter 8

Correlation versus Unified Teaching

In some schools where departmentalized teaching prevails a compromise with subject teaching on the one hand and unit teaching on the other has been attempted through correlation This can never be more than a compromise and in the end fails of its purpose for in 'correlation' no genuine integration or fusion of the various subject fields is possible

Choosing and teaching a unified theme is very different from correlating separate subjects Consider teaching such a topic as aviation through correlation as one bulletin recommended The daily work would run somewhat as follows

Spelling Studying such words as bomber stratosphere parachute camouflage

English Composition Writing a theme about some phase of aviation
Science and Nature Study Observing that the seeds of the milkweed are constructed like tiny parachutes

Arithmetic: Solving problems about the size and cost of airplanes
 Social Science: Learning how aviation affects cities, their size, structure, etc.

Geography: Reckoning distances not in miles but in flying time

Now consider unified teaching featuring some phase of aviation, e.g., "The study of modern transportation," or "With the Army Air Corps around the world," "Weather predictions and aviation," "How radio aids aviation," "Aviation as a 'round the world time-saver," "Aviation and our Good Neighbor Policy." No one of the subjects listed above can be omitted in these units, but they all contribute to the central theme.

Another example: Studying "Health" through correlation rather than through units or projects.

A. Health education through correlation:

Writing compositions on health in English class

Reading health stories in reading class

Exercises in physical education: A "milk bottle" dance

Spelling words in the health vocabulary at spelling time

During arithmetic period, doing problems related to purchasing foods for a well-balanced diet

B. Unified teaching:

Health project: Effects of various foods on our health through experiments set up with guinea pigs or white mice

A unit on foods, such as "Grain through the ages," "Our milk supply," "Wheat," or a unit on "Health and disease in a large city"

In these units, all the traditional skills and formal school subjects are utilized and they all derive their context from the central problem being studied.

Learning Skills in the Unified Program

Organized learning experiences develop and employ all the traditional skills: the ability to read with understanding, to spell accurately in writing, to write legibly, to compute accurately, to solve correctly problems involving number relations, and to use oral and written language effectively.

The repertory of skills a pupil achieves is broader than formerly. In addition to the three R's, the pupil learns study skills, ability to locate, collect, and evaluate information, ability to handle science apparatus, skill in the arts and crafts, the skills required in group

work There is time to learn only those skills that serve the pupil's real purposes

Skills that were formerly learned through mechanical drill are learned meaningfully through use in problem solving, even from the first grade

Drill is retained as a useful concept in modern education, indispensable to the fullest development and most effective use of abilities Drill periods are set aside for direct practice so that pupils develop the particular skills they need but drill on skills is diagnostic and highly individual in character Few pupils need the same work in skills at the same time Practice is made meaningful through application to curriculum projects Practice in skills is systematic and sequentially organized so that the greatest economy in learning can be achieved The way in which skills are developed in the unified program is indicated more fully in Chapter 14 Experimental data proving that skills are learned successfully in unified, problem centered teaching, are cited in Chapter 24

Equipment and Resources for Instruction

In organized learning and the unified program, use is made of the newer equipment and educational resources that modern invention has made available These include the radio, moving pictures, television, slides, and recordings Older equipment, such as tools and instruments for music and the other arts, for crafts, and for science, are adapted to even wider use than formerly In addition, such community resources as museum collections, historical landmarks, exhibits, and various social, political and industrial institutions are utilized Community leaders and persons of specialized talents or training are invited to contribute to school programs (See Chapter 16 for details)

Continued Need for Textbook Study

Organized learning does not deny the value of textbook study, or the pupil's need for facts to be gained through reading, but in the unified program the pupils are dealing with problems too alive and stimulating to be compressed within the covers of a single textbook

Forward looking educators point out that the single textbook tradition has tended to throttle teachers' efforts to make learning more concrete, more meaningful, and more genuinely problem centered One city report indicates that the city spends a hundred times as much on teachers as on textbooks, yet the textbook until recently

has completely dominated local teaching. The texts have, in fact, served as the course of study and have served at the same time as the sole standard of what children should accomplish, grade by grade. The texts have proved to be barriers against curriculum unification and more flexible scheduling.

There is a sharp contrast between subject teaching and project work in the use of reading and study materials: the difference between learning the pages of textbook material, day after day, for later testing, and using wide range material selectively to answer questions that grow out of the emerging problems met through firsthand contacts. With practice, children develop this more genuine type of purposive reading, the skill used by all grown-ups who read intelligently.

In place of the single textbook, several different texts, compendiums, pamphlets of a more temporary nature that are adapted to various levels of reading difficulty are supplied, making for a wider range of study materials.

Reading and note taking, the predominant study techniques of the subject curriculum, have an even larger place in problem centered teaching, for there are more sources available for study and more ground to be covered in study related to organized projects.

Listening to the radio, to records, seeing projected pictures and movies are new study techniques that supplement the printed page as sources of information (see Chapter 16).

Life in the School

The life in the school assumes a different character when organized learning predominates. In the first place, the entire life of the school becomes a real part of the children's learning experience. Every activity during the school day, even though it may be no part of planned lesson learning, is considered to play a part in the child's education.

The classroom becomes a workshop in which pupils are occupied with various enterprises related to daily living.

A friendly, informal, but workmanlike atmosphere prevails in which pupils cooperate in planning and executing projects.

Self-responsibility and initiative are developed. Pupils participate in and take responsibility for life in the school. They learn to manage things for themselves.

Skill in social participation is developed through many experiences that require group planning and cooperative action.

A democratic school atmosphere prevails in which the children themselves help to formulate rules and regulations

Pupils share experiences and cooperate in various enterprises with other classes. Children of various age levels have contact with each other through assembly programs, exhibits, hobby groups, club meetings, assemblies and the like. Chapter 17 gives a fuller discussion of these topics.

Socialized Learning and Democratic Experiences

The unified program based on organized learning principles provides for group learning through socialized experiences and for sharing through cooperative planning as the children work on projects under the teacher's direction. Unlike separate subject teaching which tends to encourage isolated individual competitive learning and which stimulates undue concern for arbitrary marks and comparative ratings, the unified program motivates group activity. Through group participation children learn to work together, to give and take, to be considerate of others—traits urgently needed for success in daily living. Through group work the pupils learn that every member is equally responsible for the success of the unit. Ratings are in terms of cooperative effort.

Through practice children learn the technique of carrying on small group meetings and larger assemblies, how to conduct discussion and to give talks, prepare reports, take notes, or carry on committee work. Different parts are assigned to individuals who work on committees and formulate reports (8).

Maximum intercommunication among different age groups is possible. An older group demonstrates science experiments to a younger class. Children varying in age work together on a unified project such as "The school cafeteria," "The safety program for our school," "Flag Day," an assembly program, or a dramatic production.

Aesthetic Experiences

Aesthetic experiences are included for every pupil as an added dimension in his life and as a means to broader expression in connection with various projects.

The traditional school program offered scant occasion for children to develop and to use creative talent. In the new program children explore, invent, design, and express imaginative ideas in art and music. The broader, more meaningful approach to learning affords many avenues of self-expression. The talents fostered at school

tend to carry over into the child's leisure hours. When children have a chance to display creative talent at school, aptitudes may be discovered that lead to permanent vocational interests.

In the unified program, work in the arts is not a thing apart, an extra, a subject for the gifted few to take, a fad or frill to be lopped off when economies in the budget must be effected; on the contrary, experience in the arts is for everyone an integral feature of many enterprises. This topic is considered in greater detail in Chapter 11.

School and Community

The community has a recognized part to play in organized learning. Both the direct and the indirect influence of community contacts on all the children are no longer denied or neglected, but are now utilized by the school in its training program. In organized learning, education becomes the joint responsibility of the school, the home, and the community. All these agencies join their forces in promoting child welfare. The school, more largely than ever before, utilizes community resources in guiding each child's development. The school becomes a center of community life, mobilizing educational resources in the locality to further the welfare of all the residents. For more information on this topic see Chapter 19.

Guidance in Personal Development

With the unified program the whole school contributes to child guidance because all phases of development are considered, not solely the intellectual side. Guiding the child's growth in wholesome living is considered to be as important as developing his skills and imparting information. Mental hygiene principles are incorporated in the newer school program. The teacher seeks to understand each child's behavior, to understand him as a person, to consider his strengths and limitations, and to help each child attain well-rounded, wholesome development. See Chapter 20 for a fuller discussion of this topic.

The area of health is included as a way of living at school and at home, rather than a formal school subject or separate part of the total program. The school makes a large contribution to child health through hygienic facilities as well as through curriculum studies. (See Chapter 18.)

Parent and School

Since parents and teachers are recognized as partners in a mutual enterprise, close understanding between parents and teachers is fos-

tered Studying the child in his home relationships is considered essential to a better understanding of his learning problems at school. The school seeks to educate parents to know and understand the educational program and to improve the child's home education.

New forms of reporting to the home have been devised which contribute toward more desirable school home relationships. The reports are informative, not disciplinary in character, and serve as aids to pupil guidance. (See Chapter 21)

Better Provision for the Individual Pupil

There is a contrast between developing the individual pupil and the standardized leveling-off process that has prevailed ever since the graded school was organized. Today, where organized learning principles prevail, the varying needs and capacities of learners are considered in order to insure successful results from learning at school, and to make it possible for each child to achieve his objectives through his own normal efforts to learn.

The unified program offers more possibility than any other for reaching the wide range needs of individuals in a class or group. Whether a pupil is bright or slow in learning, handicapped or extremely talented, he can make his own unique contribution to the projects at hand without having to be rated in terms of the contribution made by every other child, nor is he made conscious of deviations for which he is in nowise responsible. Learning through organized experience requires that each child work in the way that is appropriate for him, and at tasks within his capacity. The child recognizes his status as an individual with his own particular problems to solve.

The unified program and unit assignments make it possible for children to achieve successfully on an individual basis within the group at the same time that they are contributing to group projects. An individual pupil, after he has investigated some problem, may even become an authority in the class on the topic in question, e.g. poisonous snakes.

There are many possibilities in the unified curriculum for the non-academic pupil to pursue his interests in the same class as the pupil who learns more easily from books. In connection with projects and themes related to modern living, pupils can work at the problems of greatest concern to them and approach these tasks by a variety of learning methods. In many instances these projects will open new vistas and lay the foundation for vocational preparation in the high school years.

When the upper grade textbooks prove to be too hard for the pupils, as they often are, unit studies offer a solution, since they call for the study of material from many sources and of different types, selected in terms of the children's maturity. For more information on this topic see Chapter 22.

The Teacher's Role

The teacher's role is changing with the shift from piecemeal lesson learning to the more adequate program of school experiences that organized learning demands. Today the teacher functions as the children's friend and helper, the responsible elder person who is there to advise and guide. The teacher sets the stage for productive learning, directing pupils to sources of information, showing them how to find answers for themselves, and learning along with the children. (See Chapter 23.)

Organized Learning Experiences for Older Boys and Girls

It is sometimes argued that the unified program with its emphasis on firsthand learning, work shop methods, and pupil participation in planning activities, is entirely appropriate for the lower grades, but that older boys and girls need more serious and exacting studies. Actually, the unified program offers even more for the older than for younger pupils because older pupils are more capable of working independently; they have broader experiences on which to build, they have the basic skills needed for gaining knowledge, they have more maturity for assimilating the ideas gleaned through their experiences, and their increasing energy needs to be worked off through motor activity. The success of the Boy Scout movement illustrates these points.

The first experiments with unified teaching were carried on in the elementary school. In recent years, the junior and senior high schools have revised their offerings to provide broader, more meaningful learning experiences for students, rather than being merely accrediting institutions for studies "covered" in a given period of time.

Core courses, general or integrated courses, common learnings as they are called, represent the newer approach in secondary education. In these courses, subject matter from studies formerly taught separately is combined. Topics and problems can be considered on a broader basis than is possible when separate subject teaching prevails. The doubling or trebling of class time gives greater scope for com-

prehensive and original work and effects some economy in home work time.

Unified teaching in high school has the added advantage of bringing teachers into contact with students for longer than a single class period a measure that contributes to better personal relations.

The present tendency in high school program making is to offer unified courses that are required of all pupils for about half the total time and to use the remaining time in the program for electives selected with reference to the student's interests and capacities. These core courses have generally centered around the areas of English literature history and geography the arts or science and mathematics. The curriculum may include either one or both of these integrated courses in the pupil's program every day or unite these basic areas in one general course (21). The core courses generally extend through two or three regular class periods.

With this more flexible program club and school life activities can take place during the regular school day instead of being treated as extracurricular for a few students who can remain late after school.

The widening of experience during the high school years requires that the school offer electives in harmony with the pupil's interests and hobbies not all of which can be integrated with core courses or enterprises if skill is to be gained in specialized areas. Some activities may never be integrated e.g. recreation or gymnasium practicing health safeguards and the like.

Most junior and senior high schools have to work out a compromise between curriculum units that extend beyond one class period and more traditional course work partly because of higher specialization represented in the teaching staff and difficulties of programming. (One seventh grade teacher said she was certain she could not teach junior high arithmetic.) It is reasonable to expect a demand for higher specialization in high school because of the intensification of pupil interests in certain fields as preparation for vocations and to meet the requirements for college. A high school student may need or wish to study the principles of bio-chemistry meteorology trigonometry or mechanics which he is ready to learn through direct study.

The greater maturity and widening variability in the capacities and interests of high school students justifies more differentiation in course offerings and more specialization in subjects than in the elementary school but since the high school hopes to produce integrated behavior in boys and girls to produce mature self responsible in

dividuals with breadth of experience, too early specialization or too great concentration on isolated subjects may defeat this purpose. Furthermore, relatively few high school students will specialize in work requiring a strictly academic background.

Organized Learning in the Rural School

The solution to many problems that arise in rural education can be found in the unified program. Unless unification is achieved, teachers find it necessary to give each pupil instruction individually in a wide range of separate subjects. Unification cuts down the number of separate instructional periods needed. How much the newer program means to the rural child and his teacher would be difficult to exaggerate. In this plan there are many advantages:

- The class works together more like a family
- Activities lend themselves to provision for individual differences, so necessary with a wide age and grade range
- An all day program can be set up
- The life of the community which has so much to offer for school study can be utilized to the fullest extent
- The teacher cannot, or need not, adhere to a fixed program or schedule

The pupils learn about the simple basic things for which unified teaching is well adapted: foods, health, making a living, improving the community. They learn about better diet through raising chickens and goats, vegetable gardening, fruit growing. Reading and activities center around better ways of living. Through their projects, older boys and girls gain apprenticeship training for vocations.

The three R's consume their proportionate amount of time and no more.

Children who are slow and need practical experiences for living learn the things that are essential to them. They learn through meeting real problems that are vivid and concrete. Instead of having to synthesize many different elements in order to gain meanings, the problems they study are meaningful to begin with.

QUESTIONS AND TOPICS FOR STUDY

1. What advantages are there in shifting from separate subjects to unified teaching? What justification is there in the psychology of learning for such a change?
2. Discuss the statement: Organized learning and the unified program tend to prepare children for participation in democratic living.

- 3 Can all the important educational objectives be realized by organizing the program in terms of integrated units?
- 4 Why are unified teaching and activity work as suitable for the upper grades as for the primary years?
- 5 Choose any of the following topics and contrast their functions or features in traditional teaching and organized learning as defined here

Role of the teacher
 Use of textbooks
 Drill
 The library
 The skill subjects
 The use of instructional materials
 School marks
 Report cards
 The daily schedule and program
 Parent school relations

Minimum essentials
 Examinations
 The place of the arts
 Classroom furnishings
 Lesson planning
 Recess
 Promotion
 School discipline
 Departmentalized teaching
 School and community relations

- 6 List some of the possible disadvantages that might be encountered in unified teaching
- 7 How practical is the unified program for districts where the children's home backgrounds are very limited?
- 8 What difficulties is a new teacher apt to experience in putting the unified program into effect?
- 9 How can sequential subject matter be adequately covered in the unified program?
- 10 Must classes in a large urban school system necessarily be more formal than those in smaller schools?
- 11 Can any satisfactory compromise be effected between departmentalized or separate subject teaching and unified courses?
- 12 In what ways would unified teaching and learning at school be especially appropriate for the slow learner? For the gifted and talented pupil? In rural schools?
- 13 Under what conditions might unified teaching lead to haphazard or chance learning? Under what conditions could any tendency in this direction be prevented?
- 14 Summarize the chapter
- 15 Write out five additional questions or topics for discussion based on the chapter

REFERENCES

- 1 Adams Fay *Educating America's Children* New York The Ronald Press Co 1946

- 2 Baker, Clara and others *Curriculum Records of the Children's School* Evanston Ill National College of Education, 1940
- 3 Burton, William H *Guidance of Learning Activities* New York D Appleton Century Co, Inc, 1944
- 4 Caswell Hollis I *Education in the Elementary School* New York American Book Co 1942
- 5 Clouser, Lucy W, Robinson, Wilma J, and Neely, Dena L *Educative Experiences through Activity Units* Chicago Lyons & Carnahan Co, 1932
- 6 Collings Elsworth *An Experiment with a Project Curriculum* New York The Macmillan Co, 1923
- 7 De Lima Agnes *The Little Red Schoolhouse* New York The Macmillan Co, 1942
- 8 De Lima Agnes, Baxter, Tompsie, and Francis, Thomas J *South of the Rio Grande* New York Bureau of Publications Teachers College, Columbia University, 1942
- 9 Dent, Harold C "Britain Stresses the Practical" *School Executive*, 62 20 22 1942
- 10 Dent Harold C *Education in Transition* New York Oxford University Press 1944
- 11 Dewey, John *The Child and the Curriculum* University of Chicago Contributions to Education, No 5 Chicago University of Chicago Press, 1902
- 12 Dickie Donald J *Enterprise in Theory and Practice* Toronto W J Gage & Co, 1940
- 13 Ferricre Adolphe *The Activity School* New York John Day Co, Inc, 1928
- 14 Gustin Margaret and Hayes Margaret L *Activities in the Public School* Chapel Hill University of North Carolina Press, 1934
- 15 Hockett, John A and Jacobsen E. W *Modern Practices in the Elementary School* Boston Ginn & Co 1938
- 16 Hopkins L Thomas and others *Integration, Its Meaning and Application* New York D Appleton Century Co, Inc, 1937
- 17 Laton Anita D and Meder, Elsa M "Toward Unified Learning" *Teachers College Record*, 1944, 45, 225 233
- 18 Lee J Murray and Lee, Doris *The Child and His Curriculum* New York D Appleton Century Co, Inc, 1940
- 19 Lincoln School Staff *A School for the World of Tomorrow* Bureau of Publications, Teachers College, Columbia University, 1939
- 20 Lincoln School Staff *Curriculum Making in an Elementary School* Boston Ginn & Co, 1927
- 21 Lincoln School Staff *Democracy's High School* New York Bureau of Publications Teachers College, Columbia University, 1941
- 22 Jackson, Doyle D and Irwin W B *The Unit Method of Learning and Teaching* Lubbock, Texas Technical College Bookstore 1942
- 23 Loftus John J and others 'The Activity Program in the New York City Schools' *Journal of Educational Sociology* 1943 17 65 124
- 24 McKown Harry C *Activities in the Elementary School* New York McGraw Hill Book Co, Inc, 1938
- 25 Mossman Lois C *The Activity Concept, an Interpretation* New York Macmillan Co, 1938
- 26 Rugg Harold and Shumaker, Ann *The Child Centered School An Appraisal of the New Education* Yonkers N Y World Book Co 1928
- 27 Schneideman, Rose *Democratic Education in Practice* New York Harper & Bros, 1945
- 28 Schoenchen, Gustav *The Activity School A Basic Philosophy for Teachers* New York Longmans, Green & Co Inc., 1940
- 29 Stevens Marion P *The Activities Curriculum in the Primary Grades* Boston D C Heath & Co, 1931

Chapter 6

LEARNING EXPERIENCES FOR THE UNIFIED PROGRAM

Many questions arise concerning the activities and schedule for organized learning. What areas of experience are included? What subject matter is chosen? How is it organized? What learning situations do the children meet? How is integration achieved? What are the criteria for selecting curriculum units? What is the nature of teacher-pupil planning for developing the units? How can longitudinal sequence be provided for? What sort of a daily and weekly schedule of activities is set up? How are results evaluated?

All plans for educating children call for the making of choices among various possibilities. Some of the principles that govern the selection and scheduling of activities for unified teaching will now be considered.

The guides for choice of content and program making come from an analysis of the basic learning experiences needed for the child's all around growth, year by year, and a survey of the opportunities that can be provided to promote the desired learnings.

In *Developing a Curriculum for Modern Living* by Florence B. Stratemeyer, Hamden L. Forkner, Margaret McKim and Associates, published by the Bureau of Publications, Teachers College, Columbia University, 1947, there is a comprehensive chart showing the life situations learners face from early childhood to adulthood.

Since unified teaching focuses on children's objectives in problem solving rather than on isolated learning of content or skills, in order for children to achieve well balanced growth, due consideration must be given to the areas of human learning and experience that contribute most to child growth. The world of learning offers so many fascinating opportunities that selection becomes a serious consideration, in order to avoid neglecting anything in skills or content that is really essential to the child's development.

At times the claims of some areas may be greater than others. The weighting to be assigned each area depends on such circumstances as the unit themes under consideration; the age of the pupils; their

mental maturity, experiences, and background, problems previously studied and those to come, practicability, community resources, and the teacher's skill

Not every area that makes some claim based on cultural or practical reasons can be included regularly. There is only a certain amount of time available for the child's in school education and many things to be done. Flexibility may mean that at times there will be gaps in the child's learning. Certain areas must receive predominate emphasis at times while others must be subordinated yet balance needs to be maintained. This problem will be considered more fully in connection with the criteria for selection of curriculum units. (See Chapter 7.) How thoroughly an area should be covered presents still another problem.

Areas of Experience

The chief areas from which school content is derived for the unified program may be listed as follows:

A Human Activities and Relationships, Social Studies and Social Science.—Content information and generalizations in terms of social relationships and human culture. This broad topic includes the study of towns and people, trade, commerce and transportation, life in our world today and yesterday. Background studies include topics such as early civilizations, the struggle to survive, economic and social change, the story of inventions. The economics of production, money, and property properly belong in the area of social studies.

Other topics in this broad category are political and economic history, national boundaries, international relations, government services and control, geography.

B The Physical and Natural Sciences.—Animals, mechanical things, physical phenomena, composition of matter, physical causality, physiology, reproduction of species, physical and chemical change.

C Literature and the Arts, Aesthetic and Cultural Experiences.—American and English literature, classical folk lore, music appreciation and expression, drama, dancing, pictorial art, industrial arts and crafts, pottery and woodwork, household arts. Experience in these areas leads to the development of new skills as well as to new attitudes and appreciations. At numerous points they overlap with the social studies and science.

Themes and Topics for Experience Units

A study unit may be described as a series of learning experiences for developing a central theme involving a problem or series of problems. These themes are not easily encompassed within any one of the traditional subject matter areas.

In developing unit studies and core courses the topics most frequently chosen derive from the social studies. Equally good or even better claims can be made in some cases for science or arts and crafts. Since the dividing line between these fields is difficult to discern, the best plan is to center the unit studies about topics that deal with typical life problems, are timely, have immediacy for children, and involve important problems of social experiencing or living without too much concern as to whether the units fit conventional subject matter categories.

Through repeated experience with units, teachers have discovered themes and topics that make universal appeal to children of various ages or can be well taught because of resources at the teacher's command for developing the unit. This section describes unit themes and topics that have been thoroughly tested at the age levels indicated.

To list themes for unit teaching in age or grade levels tends toward artificiality, because many units are equally useful over a range of grade levels, depending upon their treatment; some could be participated in by an entire elementary school—for example, a school garden project. Others are projected for a narrow age range—the six year-olds, the ten year-olds, the young adolescents.

Most schools where unified teaching has prevailed for some years tend to plan the year's work around units that have stood the test of thorough trial. After several years' experience with a unit, the school begins to build up a library and stock of materials that insure success in teaching the unit. Consequently, it is more convenient and economical to develop certain basic units over and over, at the same time maintaining flexibility and variability, and avoiding ritualistic treatment that results from planning the entire unit in advance.

In most experimental laboratories and new type schools a basic sequential pattern for unit teaching is followed through the grades. In the primary grades the experiences begin near at home, gradually, in the middle grades, they move out into the neighborhood and the community in ever widening circles; then they spread to distant places, foreign lands, and historical eras, at still higher levels.

The following references list unit topics suitable for various age and grade levels (5, 8, 12, 15, 19, 30, 32, 34, 37, 40). See also references in Chapters 9, 10, 11, and 18.

The suggestions for unit topics given here are based on reports of units worked out in schools where unified teaching prevails, and are classified according to the age or grade level at which they were originally developed. Some are more appropriate for rural schools, others for city children. Some are richer in science content, others in arts or the social studies. All draw upon general content fields in varying degree.

Beginners.—Perhaps it is better to speak of activities than of unit studies in the first grade, since at that level many different experiences are met simultaneously, or follow one another in rapid succession.

Problems for Grade I listed in the Virginia course of study (36) include

- Caring for own possessions and things that belong to others
- Knowing what to do when taking trips
- Knowing how to help at home and school
- Having a good time together
- Knowing how to keep healthy

Activities may include playing house and making a playhouse, making a pen for pets. One group converted a large drygoods box into a pen in which to keep a setting hen in order to watch the eggs hatch and the chickens develop. *'Living in our school'* is a good theme for the first grade; similarly, playing "post office" or "fireman."

Six year olds study markets, shops, ferries and bridges, boats, trains, trucks, and other features of the local scene by actually visiting them, talking with the workers and observing their operation. On their return to school they reproduce what they have experienced in their work and play—in discussion, painting, drawing, dramatic play. Stories, poetry and songs are enjoyed in connection with the activities.

Children of this age observe community life; they learn about food, clothing, shelter. One first grade class had a cafeteria unit. They played "cafeteria" after some of the children had gone to cafeterias in the city. They learned to select meals and the activity developed into a foods unit. A beekeeping unit fascinated another first grade in which there were several well informed children from beekeeping families.

Other suggestions for first grade experiences are given in Chapter

Primary Grades.—Seven-year-olds are ready to explore the neighborhood and wider environment of the city and country about them. They take trips to the farm, market, pasteurization plant, to boats and trains to study mail, food, transportation and communication. They may make a play city in their classroom. They observe the things going on in the neighborhood: paving, building, painting, excavating, farm work, bakery, dairy plant. Their projects may include: "Carrying the milk," a study of milk; building and running a fruit and vegetable market; giving a fair; studying the home life of the ant, the bee, or other insects. They may study the birds in their locality. "Life at the circus" is another good theme for this age.

Problems for Grade II listed in the Virginia course of study (36) include:

- Caring for and using plants
- Becoming acquainted with the community
- Sending and receiving messages
- Making and keeping things around us clean and beautiful
- Having a good time in our community
- Keeping ourselves well and safe

The second grade may take on a short practical project, such as planning and buying materials for a sand box.

Eight-Year-Olds.—By third grade, the child's life at home and school becomes more complex; he is ready to forge ahead with organized learning experiences at a rapid pace. Reading becomes a widely used basic skill.

According to the recapitulation theory, eight-year-olds are ripe for the life of the cave man, primitive tribes, Indians, primitive ways of living, the age of fable. Whether or not the theory holds, this is the world that captivates the eight-year-old.

One third grade centered its study around primitive man, using "Turi of the Magic Fingers" as the book from which the outline for their dramatization was taken. The possibilities in studies of Indian life for children of this age are described by Helen Gumlich (13). A bulletin published by the State Teachers College of Washington, at Ellensburg (33) gives other suggestions.

Groups in New York study the local history of Manhattan Island, the Dutch and Indians in New Amsterdam. One unit in these grades culminated in a Thanksgiving party for the parents.

However, most third graders have interests that carry them far beyond Indians and cavemen. Problems to be developed through

experience units in the third grade as listed in the Virginia course of study include

- How do animals help us?
- How can we choose suitable clothing?
- How do we obtain a variety of goods?
- How do people provide homes?
- How do animals care for themselves?
- How are plants fitted to care for themselves?
- How are patriotic and religious festivals celebrated in different communities?

One primary group developed a unit centering about *Our Health* as a result of which they gave cups and towels to the school. A group of bright third grade rural children enjoyed a city project.

One third grade in connection with a study of pioneer life took an excursion to an old log cabin in the city park to see the different types of pioneer articles found there. Another group had a farming and vegetable gardening project which yielded large returns in nutrition, improved health habits, recreation and arithmetic. Rudimentary work in science offers many possibilities at this level.

At this point in the child's development there is a question as to whether children's needs are better served through the study of *problems in their own environment or through a study of the cultures of people in other lands and other times* e.g., Greek life. The Virginia course of study recommends the former.

Primary children on an Indian reservation studied the care of livestock, since this was a topic of immediate concern to the children and their families and offered possibilities for firsthand learning.

Middle Grades.—Many topics are equally well suited to higher and lower grades. The nine year-olds are able to handle more history and science, to use source materials of the school library, museums, and to study maps.

In one school a study of rocks led to a study of the earth's beginnings, including elementary astronomy and the beginnings of geology—the earth, sun, moon, planets, stars, prehistoric life, the earth's surface, the development of life upon earth.

A Swiss unit provided the meaningful framework around which activity in a fourth grade centered for a time. In beginning the unit, the children told what they wanted to know about Switzerland. Questions were copied on the blackboard. So much material was available in their own Canadian mountain country that the teacher

and pupils had to choose carefully from among the many suggestions given. In this community, the children were familiar with a snowy climate and enjoyed winter sports. In a unit on tree conservation, fourth grade pupils combined study and play at one point in their project with an all day picnic held in the country.

In Grades IV and V, emphasis is placed on the individual discoveries and inventions of man, and how these discoveries and inventions have led to mass production of goods and services. Other suitable topics are: "The rise and fall of native (Indian) civilization in North America"; "Indian life in contrast to Mexican, Negro, Eskimo."

In one fourth grade the children worked on the subject, "How animals protect themselves," as a basis for writing short stories for use by the second grade children in their study of animals. "The first settler," "How a town grows," "Transportation," have proved to be good topics for other units.

One class took "A trip around the world." Another fifth grade planned and made a tepee the way the Indians made them. One group enjoyed a music unit in which they made music pipes and reeds, composed their own melodies and played them. Giving a puppet play is enjoyed by children in the middle grades. The children make the puppets as well as compose and give the play.

Ten-year-olds enjoy studying pioneer life, with development of transportation, evolution of common things, American history, knowledge of the geographical divisions of the United States, the relationship between climate and topography, vegetation and animal life, westward migration, pioneer railroading. Good topics are: "From Daniel Boone to aviation," "How our ancestors lived in Colonial days in America."

Upper Grades.—Appropriate general themes for eleven-year-olds are: natural resources, conservation; sources of power, coal, oil, gas, electricity; the development of life on earth; the contrast between the old and new in our civilization; pioneer days; modern life and the machine; communications and transportation; the evolution of common things; how man has developed and improved his environment; food and shelter; health in the community. Many of these themes combine content from both social studies and science.

Upper-grade pupils study primitive man on a more mature level than in the primary grades. A study of ancient peoples, Egyptian, Greek, and Roman, yields many values in the upper grades. An

Egyptian unit is full of possibilities for this period. It can be rich in science interest, with the time clock, movements of the earth and stars. The beginnings of civilization can also be studied profitably at this period.

A unit on pioneer life in America can be taught in conjunction with the study of the westward movement in American history. In one fifth grade the theme 'Pioneer Days in the States' included a study of an ancient school building in the vicinity and a visit to Granny Lowe who had lived in her primitive cabin on the edge of town for over fifty years.

One group took 'A Trip to the Holy Land', another spent the term studying 'Oil' considering the subject in all its social and scientific ramifications (10).

Clothing the people of the world the history of costumes is a theme that can be developed in many ways. Related topics are cotton manners and customs. A kite unit gave one fifth grade some air conditioning and at the same time afforded much needed practice in fundamentals of arithmetic. A newspaper unit in which all the class participate has unlimited possibilities.

Unit topics recommended for Grade VI in the Virginia course of study relate to the following problems:

- How can we conserve natural resources for our own good and for the good of those who live after us?
- How do people help each other through the work they do?
- What do we need to consider to purchase goods wisely?
- What makes communities grow?
- How can we use machines to save our time and how can we use this time wisely?
- How can we live safely?

All Grades Together—For the whole school together or several grades combined there may be work on community problems: learning to improve the physical environment, raising livestock and vegetables, gardening, learning to like vegetables, learning new health practices. The activities may include writing and publishing a school paper, giving a party or entertainment for parents as a project in itself or as the culmination of a larger project, clearing up the school yard and decorating the school. All the grades together in one school celebrated "Christmas in Old England" spending some weeks in preparation for the festivities.

Intercultural education projects lend themselves well to skillfully planned and directed all school activities. (See Chapter 12)

Unit Sequences in an Experimental School

Agnes De Lima has described the series of experiences provided for children in an experimental school in New York City (8).

The *six-year-olds* become acquainted with their locale, Manhattan Island, through taking short trips. They have daily discussions, describe their experiences, have work periods, enjoy block building. The *seven year-olds* get further acquainted with Manhattan Island by studying New York City's housekeeping. They investigate the food supply, the markets, the sanitation and fire departments, become acquainted with the various vehicles and the machinery with which the city's housekeeping is done.

The *eight year olds* are Indians.

The *nines* show interest in foreign lands and peoples, enjoy folk tales of the people they study. They relate this study to geography, have science experiences, learn arithmetic, tend plants at school, have music and creative writing experiences, enjoy poetry, have activities on the playground.

The *ten year olds* study early man. When the race question came up with one group they studied the Jewish people and their contribution to civilization. In this study they learned about tolerance. Children of this age also study elementary physiology and get acquainted with their own bodies.

The *eleven year-olds* face growing up. They learn the elements of research in their science studies, obtain larger training in responsibility in shop work, have a wider program in sports and folk dancing.

The *twelves* go American. They study problems of yesterday and the growth of American democracy. They depict the pioneer family. At this age the children enjoy work in geology.

For other topics related closely to the social studies see Chapter 10 for science and Chapter 18 for health.

The following units for Grades I-VII in the Teacher's Lesson Unit Series have been published by Teachers College, Columbia University.

GRADE I

A Grocery Store
Our Happy Playhouse
Our Very Own Circus
Farm, Plant and Animal Helpers
Dogs
Trains

GRADE II

A Fair and a Study of Milk
A Play City
Cotton
Wheat
Our Bird Friends
Bees

GRADE II—(Cont)

Farm to City and Back
Post Office
Police Protection
Boats and the Harbor

GRADE III

The Story of Wool
Shoes
Indian Life
Cotton
Paper
Aviation
Weather
Transportation
Homes

GRADE IV

The Spanish Trail
A Trip to Hawaii
Indians of the Southwest
Mexico
Trees
Creatures of the Sea
When We Were Nomads
Story of Communication The
Telephone
The History of Lighting
Our Feathered Friends
Round and Round the World

GRADE V

The Spanish Trail
A Trip to Europe and the British
Isles
History of Transportation in the
United States

GRADE V—(Cont)

Conserving Our Plant Life
How the Fishing Industry Helps
Man
Egypt
History of Communication
Clothing
Young Nutritionists in Action
Marionettes Tell the Story of
Robin Hood

GRADE VI

Conserving Our Plant Life
Saving
Travel on Land on Sea and in the
Air
Bonds of Air (How Aviation
Binds the Nations Together)
Rome From Legendary Kings to
Great Emperors
A Medieval Tournament
The Story of Records
History of Communication
Budgeting The Arithmetic of Fi-
nance
Our Trip Abroad
Farm Life

GRADE VII

Back to Colonial Days
The Crusades
Banking
Our Government and Ourselves
The Westward Movement
Postal System of the United States

Junior High School Topics.—Many themes developed in the elementary grades are equally suitable for high school with more advanced treatment of principles and concepts in science, mathematics, biology, economics, and social science. The themes are developed through wide range reading, the use of firsthand experiences and many instructional resources.

Recommended topics for junior high school include man and his environment, the Industrial Revolution, Colonial life in America

Latin American life and culture, seventeenth century English life, study of Oriental cultures the Far East, health in the city, living in a power age, urban life living in an American city, life on the farm yesterday and today This last named study is enriched through actual trips to a farm or spending a week end on a farm Junior high school students in the Lincoln School, New York, wrote a play, "A Pageant of Chinese History," based on the reading and study they had done in their unit on China

Senior High School Unit Topics.—Topics for unit studies include ancient and modern cultures days of chivalry, ancient Greece, man's development, mentally and physically, the world community, a study of utopias, the American way of life, youth in America today, world horizons, the world today, world problems problems in human living our future, vocations, colleges, our natural resources and their use conversion of power, our government, American civilization, our technological age, American life and literature, this machine age, the Industrial Revolution

High school students consider technological advances in housing and health Editing the news, a study of newspapers and publishing methods, is an interesting theme There are unit studies for these older boys and girls that involve out of town trips, e.g., our national government, with a trip to Washington, our state government in New York, with a trip to Albany for residents of New York State They learn consumer education through first hand experience, in operating a cooperative enterprise, such as a snack bar, a book or white elephant exchange, a project that cuts across virtually all subject matter and skill areas that could be listed

All senior high school students should learn about vocations, getting acquainted with educational opportunities for trades, vocational work and the professions both as cultural background and as preparation for their life work Some of these experiences can be tied in with regular class work in content areas, such as science and the social studies

Rural Schools.—Topics suitable for upper grade pupils in rural schools include farming and agriculture the study of soils conservation, rotation of crops, mixed farming, use of tools and farm machinery, fruit growing care and breeding of livestock lumbering The study of foods preservation and preparation, food requirements of the body, balanced menus, planning and serving of meals In addition, rural children need to learn about health practices and means of recreation Music, art and games should be included in the

day's work at school Hobbies are encouraged, such as insect collecting or handicrafts

Slow Learners.—Projects for slow learners need not be different in type from those developed with normal learners The chief difference lies in the greater use of nontextbook materials, visual aids, concrete experiences, and choice of briefer and simpler projects, with a slower pace in developing each phase of the project Projects carried on by the older slow learners at the Speyer School (42) included "We Visit the Orient," "Public Service and Public Utilities," "Our City," "A Year of Nature Study in Our City"

Illustrations of Units for Organized Learning

Several illustrations taken from actual classroom practice will show how experiences are used in developing curriculum units More extensive reports of unit teaching will be found in the next chapter

A First Grade Goes Exploring.—A first grade in New York City studied features of their local environment the ferry crossings, the tunnels, the bridges, the river traffic They took a trip to a metropolitan airport and to a railroad station to see a plane on exhibition They built bridges and boats, and painted pictures of them They went up to the school roof to get a better view of the city and the river, took a walking trip to the river and a trip on a ferry boat With blocks cardboard, and paints the trip to the lighthouse was reconstructed The children engaged in extensive block play in which trains and boats brought food to the city They composed stories and songs relating to their experiences, read from charts on which their stories were reproduced, made a layout of the city with blocks and other materials Dramatic play was a major activity, chiefly dramatization of city and transportation themes, the busses, the policeman, street cleaner, the lighthouse keeper, the Coast Guard patrol the locomotives and the engineer They composed simple songs and tunes to accompany the dramatic play All this is described in Miss Lulu Wright's *A First Grade at Work* (31)

Care of Pets.—In another first grade, the children took turns bringing their pets to school A strong, good sized pet cage was provided with a solid bottom and sides, and top covered with strong wire mesh Among the pets brought were dogs, cats, pigeons, ducks, chickens, a turkey, and a baby lamb The class talked about the animals and as a group composed stories about them, giving the teacher sentences to write on the blackboard.

Book reading was begun with stories of pets. The children identified one of the stories with the kitten a child brought to school. The stories the children composed were mimeographed on sheets to mount in their scrap books. This study led into the larger subject of wild and domestic animals, their habits, and characteristics.

Second Grade Project The Grocery Store.—A second grade visited the grocery store near their school. They decided to build a grocery store in their school room. They constructed the store of orange boxes and furnished it with packages brought from home. They cut from newspapers pictures of things they wanted in their store and made things for the store. Price tags were made and the children learned to read the prices as well as names of articles in the store. Nothing in the store was to cost over ten cents.

The children discussed the many ways of measuring groceries. They found out that groceries were sold in different ways in bottles, cardboard packages, paper bags, cloth bags, cans, etc. They learned to read the grocery advertisements placed around the store and practiced making change. This unit gave practice in reading, arithmetic, spelling, writing, and oral expression.

Third Grade Handling the Milk.—A third grade in a large public school assumed responsibility for serving the daily milk to the entire school. This meant calling at each classroom daily, thirty-eight in all, securing orders and delivering the milk, keeping records of the amount ordered and sending out the bills. The children soon saw their need for more arithmetic and for two months they worked hard to perfect themselves in these skills. Formerly unused to responsibility, they took great pride in handling the milk. Their penmanship improved under the necessity of making out bills and handling the business connected with the milk. The milk committee, consisting of ten children, was changed each week. They practiced arithmetic, making change and keeping books, until they could handle all their accounts without the teacher's supervision.

The program was widened by the study of milk, its production, and transportation. This led to a study of the general food supply for a large city and included the city's geography. The children brought in newspaper clippings, made maps and pictures of bridges they took trips to the docks and freight stations. The following term they ran a post office turning over the responsibility for the milk to the next lower class.

Fourth Grade The Evolution of Lighting.—A fourth grade in Lynn, Massachusetts, celebrated the Golden Jubilee of Edison's in-

vention of electricity with a unit on lighting. This unit is described by Josephine Horgan in a bulletin *The Story of Lighting* (17).

In their planning for the unit pupils raised questions about primitive types of lighting, lights of the Indians and the Pilgrims. They wanted to know how candles were made in colonial days, how streets were lighted in the olden days, how and when gas lights were first used, the different types of lamps manufactured. They decided to learn how Edison helped light the world and to study other inventions by this great man. They decided to find out why their city was called the best lighted city in the world.

In connection with the unit the children prepared a talkie on the theme *The Discovery of Light*. The talkie consisted of a roll of pictures depicting various episodes in the evolution of lighting, accompanied by dialog with various pupils taking the different parts. There were sections on *The Discovery of Fire*, *Indians and Colonial Lights*, *Discovery of Gas*, *Scenes from the Life of Edison*, *Lights in Lynn*.

Various activities included in connection with the unit were a visit to the historical museum to see the collection of antique lighting equipment, collecting lamps and lights of all kinds, preparation of the pictures for the talkie rolls, writing up their project as a section of a history of their city which was being prepared by the school children.

All the areas of subject matter that are usually included in the fourth grade curriculum entered into this study—history, geography, science, literature, the fine and industrial arts. Many skills were employed and practiced as the project developed—reading, oral and written language, and arithmetic.

Stamp Sales.—Around Christmas time another fourth grade class set up a post office and shop for the sale of stamps and cards. They sold Christmas cards and calendars that had been manufactured commercially as a Grenfell Labrador Mission benefit. The pupils sold stamps and conducted all the business connected with purchases and sales. They continued the shop throughout the year, selling picture post cards for charitable purposes and government war stamps. Various aspects of the work were rotated among the children who were organized in temporary committees. This project was tied in at many points with other class work.

Upper Grades Gardening.—An upper grade planted and harvested a garden. The teacher's description is as follows. After coming to the decision that we would make a Victory Garden, there

were the problems of: Where? What size? How to do the work? What to plant? and, What is the best time for planting the different varieties of seeds?"

From their reading about soils the children learned how to choose the plot, measured the plot to calculate the amount of seed that would be needed, decided what vegetables to plant, and got the soil in condition for planting except for the plowing. In various stages of their work the children studied catalogs and consulted experienced gardeners.

Orders for seeds required: computing the total cost, correct spelling for the different kinds of seeds, proper form for writing an order, the correct method of addressing the envelope. Not only were the three R's brought into this activity repeatedly, but science, health, and art, as well.

Making Lamp Shades.—One class preparing for a school bazaar made parchment lamp shades. They bought their materials, learned how to make the shades, estimated the cost, and did the work. They inquired of a lamp shade manufacturer what the "mark-up" price should be. When he suggested 50 percent over production expenses, they priced the shades made of materials that cost seven cents at eleven cents. When their attention was called to the fact that they had not allowed for their time and labor, they decided to charge this item at 25 cents. All this experience gave combined training in socioeconomic competence that, according to the teacher, produced more lasting learning in genuine problems than any formal drill in arithmetic or recitations of the "question and answer" type possibly could.

In another school, a store was operated by the members of an older group. They sold such essential articles as soap, toothpaste, and stamps, as well as cookies and candy which they made in their cooking class. The store was self-supporting and made enough money to enable the children to vote contributions to several worthy causes. Running the store was considered a phase of arithmetic. Each child was given a weekly allowance, which necessitated keeping accounts and raised many problems in practical arithmetic. Plans for the store, and other activities, were made by the Student Council which met several times a week.

A fifth grade studied important American inventors. The class prepared a shadowgraph dramatization of the life of Eli Whitney. Some of the children made charts showing the evolution of the cotton

industry Others made murals to depict the different phases of inventions

Sixth Grade—A sixth grade chose as their enterprise for the term the theme "A Study of South America" They studied the transition from rural agricultural to urban industrial living, distribution of races in South America native customs arts and crafts aborigines and their conquerors imports and exports foreign trade development of aviation effects of the war on trade and manufacturing They collected both natural and manufactured products of South America, displayed these in exhibit cases they arranged and made murals showing scenes from South American life for all four sides of the classroom The products resources and physical features of South America came alive through the making of an electrical map of South America Nearly every child planned and made a map to hang up at home The maps showed the topography, contour resources, population centers, and the like. The children also made a collection of maps and charts

They studied the Portuguese settlements of Brazil made replicas of South American antique vases and made colorful murals depicting three important periods of Peruvian civilization—Inca Pizarro's conquest, and a market place in modern Peru They wrote stories about South America and made dioramas of South American industries They read extensively in the literature and reference sources about South America, heard talks by natives visiting in North America learned native songs and dances and gave a radio program at a commercial broadcasting center as part of a Good Will program a gesture from the school children of America to the Southern countries below the equator They learned some Spanish words and phrases A wide range of skills and content areas entered into the study including art music history, geography, economics arithmetic written composition and Spanish (9)

Another sixth grade gave a play they had written themselves as the culmination of their study of phases of Latin American history The entire class divided into five groups and developed scenes and dialogues as follows

- The Mayans—Pre Colombian Period
- Francisco Pizarro and the Incas
- The Colonial Period around 1700
- The Independence Period—Bolívar
- The National Period—Scenes in Brazil today

Conservation of Plant Life.—Children in fifth and sixth grade classes at the Training School connected with the Teachers College, Johnson City, Tennessee, became interested in studying the conservation of plant life. The development of this unit is described by the teacher, Isabel Martin (24). In the room the children accumulated a collection of wild flowers and a number of books about wild flowers. The children expressed much interest in learning more about wild flowers, and thought that a good way to learn would be to take a trip to the woods and fields. Stories, poems, and books supplied a wealth of information. A scrap book was begun containing clippings of local interest. The study expanded to include insects and their relation to the welfare of plants. Charts were made indicating the names of wild flowers the children identified, the places where found and the date, the color, size, type of leaf and other facts about the flower. Small individual charts were made by the children for their notebooks. There was considerable reading as well as oral and written language work as the children studied the printed matter for information, and prepared their reports. There were stories and poems written by the children on wildflower themes.

Many social science concepts entered into the study: the struggles of the early settlers to make a living, the relation of plant conservation to human welfare, a study of the work of our national parks.

Projects that grew out of the central theme were: the preparation of a class newspaper, art activities including poster-making, block printing, chair painting, sewing, construction of a miniature theatre. A list of the source materials available for this study is appended to the report.

High School.—In several high school classes in one school, an experiment was conducted in integrated teaching using as the theme "Oriental Culture" (29). The work usually done in separate English, social studies, and art courses was fused into one integrated unit. Techniques from all these conventional subject areas were continuously employed: tools of written and oral expression, literature, the arts, and research techniques needed in social studies. The students learned to appreciate and understand their own culture through studying that of other races. They found the life of the people reflected in their literature and art processes.

In the course of the year's work, one group concentrated chiefly on China. They studied life in the farm villages, the farmer himself, work of craftsmen, factories, the home, food, clothes, customs, religion, education and recreation, art, architecture, literature, cities and

government At the close of this extensive study, exhibit cases were arranged in which the resulting work was displayed

One ninth grade class chose as its theme "Life a Century Ago" This was an integrated unit of work in which English, social studies, and art were drawn together, culminating in a literary product, "And So They Lived," written by the whole class The students showed in this booklet the life, culture, and customs of the American people in the period 1830-1860 The art committee made block prints for illustrations, the writing committee wrote the chapters, using the social studies reports There were descriptions of a representative northern family, a southern family, and a western family The enterprise culminated with an evening party to which all parents were invited A few skits were given to show the guests how the class worked on the project

A high school girl described a project carried on by her class which traced developments in the United States over a period of a hundred years This unit combined material from the social studies, science, literature, and the arts She reported

Through the use of our textbooks, maps and movies, our class has been studying about the country of North America, our own place of abode, 'The American Way of Life' Our study of North America has been aided materially by such movies as 'Coast to Coast' Panama Canal," and Greyhound Bus Trips to different parts of the interior We have made a thorough study of the people the climate, the topography, the industries, habits, customs, literature, the modes of living, travel, trade and commerce

A year's work in the tenth grade, centering about the theme of human growth and development and combining work in biology and English, has been carried on at the Horace Mann Lincoln School, New York By the tenth grade, boys and girls are ready for more understanding of themselves as individual persons and in relation to their fellows They need this larger understanding in terms of their biological, social, mental, emotional, and spiritual growth The Horace Mann-Lincoln School project began with the origins of human life, embryonic development, considered basic behavior mechanisms, man's nervous system, emotional equipment, heredity, physical growth, and mental maturation Each student prepared a biography covering his life span from babyhood, making use of any objective records that were available After this foundation had been laid, students turned their attention to the psychology of learning memorizing, thinking and problem solving, individual differences in

capacities, the sublimation of native urges, emotional growth group morale, and tolerance. This study led the students to consider their own traits and capacities in terms of their goals and aspirations, and to gain new insight into their roles as individuals each with a distinctive part to play in a social world.

In addition to all this, the pupils mastered skill in writing correct, expressive English through use in actual content writing.

Rural School A Farm Unit.—Children in a rural community (18) made a lively study of farm life. These sixth graders were stimulated to undertake the study after having attended a county institute where they heard experts report on modern methods of gardening, dairying, and poultry raising. They became enthusiastic about diversified farming and a better kind of farm life than that represented by their own homes and farms. The group took a series of field trips with their teacher, the first one to visit a model poultry farm. As a result of this visit the children decided that they would like to make a reproduction of this farm. A committee of six pupils was chosen to make further visits to gain the additional information needed in laying out their own plant and constructing the poultry house. After the committee's visit they immediately began to work on their model poultry farm. The committee of six was asked to report to the class on their visit. Several reported on farm machinery and one made an illustrated book describing farm machinery. A final trip was made to state institutions where the children inspected silos, dairy barns, milk houses, barns, the poultry house, and rabbitry.

The reading done in connection with this unit ranged through material on farm life in library books, supplementary readers, children's encyclopaedias and bulletins, and clippings from newspapers and farm journals. The children were assigned questions to answer and topics to study related to the larger theme. All the areas and skills commonly taught in the sixth grade entered into this unit from its inception to the concluding phases.

REFERENCES

- 1 Baker Clara and others. *Curriculum Records of the Children's School*. Evanston, Ill. National College of Education, 1940.
- 2 Baker Harold V. "Children's Contributions in Elementary School General Discussion." *Child Development Monographs* No. 29. New York: Teachers College, Columbia University, 1942.
- 3 Barnes Emily A. and Young Bess. *Children and Architecture*. New York: Bureau of Publications, Teachers College, Columbia University, 1932. Chapter 2.

- 4 Bonser, Frederick G "Curriculum Making in Laboratory or Experimental Schools" *Twenty-Seventh Yearbook of the National Society for the Study of Education Part I Vol 26*, pp. 353-362 Bloomington, Ill Public School Publishing Co, 1926
- 5 Bowen Genevieve *Living and Learning in a Rural School* New York The Macmillan Co, 1944
- 6 Bruner, Herbert B and others *What Our Schools Are Teaching* New York Bureau of Publications Teachers College, Columbia University 1941
- 7 Clouser, Lucy W and others *Educative Experiences Through Activity Units* Chicago Lyons and Carnahan 1932
- 8 De Lima, Agnes *The Little Red Schoolhouse* New York The Macmillan Co, 1942.
- 9 De Lima Agnes, Baxter Thompsie A and Francis Thomas J *South of the Rio Grande* New York Bureau of Publications Teachers College, Columbia University, 1942
- 10 Dickie, Donald J *Enterprise in Theory and Practice* Toronto W J Gage and Co, 1940
- 11 Gans, Roma *Guiding Children's Reading Through Experiences* New York Bureau of Publications Teachers College Columbia University, 1941
- 12 Giles, Harvey H *Teacher Pupil Planning* New York Harper and Brothers, 1941
- 13 Gumblick, Helen R "Denver Third Grade Plays 'Injuns'" *Childhood Education* 1934, 11, 17 20
- 14 Gustin, Margaret and Hayes Margaret L *Activities in the Public School* Chapel Hill University of North Carolina Press 1934
- 15 Hockett, Ruth M (Editor) *Teacher's Guide to Child Development* Developed under the direction of the California Curriculum Commission Sacramento California State Printing Office, 1930
- 16 Hockett, John A and Jacobsen, E W *Modern Practices in the Elementary School* Boston Ginn & Co, 1938
- 17 Horgan, Josephine *The Story of Lighting* Teachers Lesson Unit Series, No. 2, New York Bureau of Publications Teachers College Columbia University, 1931
- 18 Kidd, Mary F *Farm Life* Teachers' Lesson Unit Series No 93 New York Bureau of Publications Teachers College, Columbia University, 1936.
- 19 Lane, Robert. *A Teacher's Guide Book to the Activity Program* New York The Macmillan Co, 1932
- 20 Lee, J Murray and Lee, Doris. *The Child and His Curriculum*. New York D Appleton Century Co Inc, 1940
- 21 Loftus, John J, and others "The Activity Program in New York City Schools" *Journal of Educational Sociology* 1943 17, 65 124
- 22 Mabee, Elsie. *Young Nutritionists in Action* Teachers Lesson Unit Series, No 103 Bureau of Publications Teachers College, Columbia University, 1942
- 23 McKown, Harry C *Activities in the Elementary School* New York McGraw-Hill Book Co., Inc., 1938.
- 24 Martin, Isabel *Conserving Our Plant Life* Teachers Lesson Unit Series No. 39 New York Bureau of Publications, Teachers College, Columbia University, 1937
- 25 Porter, Martha P *The Teacher in the New School* Yonkers, NY World Book Co., 1930
- 26 Stevens Marion P *The Activities Curriculum in the Primary Grades* Boston D C. Heath & Co., 1931
- 27 Strickland, Ruth G *How to Build a Unit of Work* Washington, D C. U. S. Office of Education, 1946.

- 28 Sweeney, Frances "Integration in the Junior High School" *Teachers College Record*, 1936 37, 399-405
- 29 Sweeney, Frances, Barry, Emily F, and Schoelkopf, Alice *Western Youth Meets Eastern Culture* New York Bureau of Publications, Teachers College, Columbia University, 1932
- 30 Tippet, James S and others *Schools for a Growing Democracy* Boston Ginn & Co, 1936
- 31 Wright Lulu *A First Grade at Work* New York Bureau of Publications, Teachers College Columbia University, 1932
- 32 *The Activity Movement Thirty-Third Yearbook of the National Society for the Study of Education*, pp 121-122 Bloomington, Ill Public School Publishing Co 1934
- 33 *Activity Units in the Elementary School* Bulletin of the Washington State Normal School Ellensburg Washington July, 1934
- 34 California Curriculum Commission *Teachers' Guide to Child Development in the Intermediate Grades* Sacramento California State Department of Education, 1936
- 35 *Changing Concepts and Practices in Elementary Education* Board of Superintendents, Division of Elementary Schools, Board of Education of the City of New York, 1942
- 36 *Course of Study for Virginia Elementary Schools, Grades I-VII* Richmond State Department of Public Instruction, 1943
- 37 *Illustrative Teaching Units for the Elementary Grades* College of Education University of Minnesota, Minneapolis University of Minnesota Press, 1941
- 38 Kansas State Department of Education *Selecting a Unit* Bulletin No 3 October, 1937
- 39 *Library Books Helpful in Planning Units of Work in the Elementary Schools* Bureau of Libraries, Board of Education of the City of New York. A classified list
- 40 Lincoln School Staff *Curriculum Making in an Elementary School* Boston Ginn & Co 1927
- 41 *Living and Learning in the Elementary Grades* An Intimate Study of the P. K. Yonge Laboratory School, University of Florida, Gainesville, Florida, 1943
- 42 *Final Report of Public School 500 (Speyer School)* New York City Board of Education, 1941

The following references contain lists of units and activities with indications of the grade levels in which they have been developed

- 43 Hanna, Paul and Carey, Alice, and Meriam, J L *Catalog of Units of Work, Activities Projects, etc* New York Bureau of Publications, Teachers College, Columbia University, 1932
- 44 Meriam Junius L *Activities, Projects, Units of Work Cataloged for 1932-1939* Berkeley, Cal University of California Press 1943

Organized groups of units have been made available by several publishers More than a hundred developed for Grades I to XII have been described in a series of pamphlets *Teachers' Lesson Unit Series*, published by the Bureau of Publications, Teachers College, Columbia University A group of twenty units is distributed with each set of *Britannica Junior, an Encyclopaedia for Boys and Girls*, Encyclopaedia Britannica Co, Chicago, Ill Another series of *Activity Units* is published by W F Quarrie & Co publishers of the *World Book Encyclopaedia* There is a series of illustrated units published by the F A Owen Publishing Co, Dansville, N Y Also, outlines of units for the elementary school appear each month in the *Grade Teacher*

Chapter 7

PLANNING AND DEVELOPING EXPERIENCES FOR UNIFIED LEARNING

Criteria for the Choice of Unit Activities

What criteria shall guide curriculum makers and teachers in choosing the topics for projects or unit studies?

Leaders in education have given considerable thought to this question, summarizing their judgments and experience in a number of publications (6, 10, 16, 20, 36, 40, 41) * Learning experiences for children are not fortuitously selected, but their choice is based on recognized standards, and the selecting is done in the light of recognized criteria

In choosing such a theme as "Trains" for the first grade or "Transportation" in the higher grades the teacher considers what contribution these themes will make to the broad objectives or purposes of education, as well as to specific objectives to be met

The chief criteria for the selection of unit experiences may be summarized as follows

Relation to the Concerns of Children Units selected are related to the immediate concerns and purposes of children, and to the problems they need to solve. They are developed and interpreted in terms of life situations and the needs of the pupils as observed by the teacher

Compatible with the Pupil's Maturity Units selected take account of the pupil's maturity in its major aspects—mental, physical, social and emotional. They are compatible with natural behavior tendencies in childhood and are chosen with reference to readiness for learning. They are difficult enough to challenge effort, easy enough to be completed successfully

Realistic Experiences The unit experiences have maximum concreteness involving doing something, making things, solving life-like problems

Wide Range Activities Units provide for a wide range of activities in various media. These activities include language expression,

* See references at the end of Chapter 6.

the arts, dramatics, experiments, assembling materials, observation, creative expression Pupils exercise choice in selecting from many activities

Subject Matter. Unit experiences selected draw upon the basic fields of knowledge social studies, science, literature, the arts The units contribute to the pupil's acquisition of organized knowledge

Contribution to Social Understanding Units operate in a social situation, contribute to the child's understanding of social life, develop social attitudes, and give opportunity for experience in the main aspects of social living The units provide for group cooperation, social planning, participation by pupils in socially useful undertakings

Growth in Interests Units selected are those that lead to growth in range and depth of interests, that broaden the pupil's scope of knowledge and understanding

Problem Solving Attitude Units selected are provocative of the problem solving attitude, they induce a challenging mind set, stimulate curiosity, the wish to do and to dare, to explore

Provision for Learning Skills and Techniques Units are selected that contribute most to the acquisition of skills and techniques at each age level, the fundamental tools that every educated person needs in handling his daily life problems These include the skills of reading, writing, spelling, oral and written language, arithmetic, using library facilities, techniques in the sciences, self-expression in the arts

Adaptation to Individual Differences Experiences are chosen that are adaptable to a wide range of pupil ability within a classroom The units are sufficiently broad and flexible to challenge the interests and abilities of every pupil in the group

Facilities for Developing the Unit Units are selected in terms of available equipment and with reference to practical limitations of time scheduling and school facilities Nontraditional tools and materials are freely utilized

Continuity Continuity in learning experiences is provided through the selection of projects and subject matter in sequential relationship Units selected are built upon the child's previous experiences and prepare for experiences that are to follow

Time Span Units are chosen that require sufficient time for children to carry out explorations and studies that can be brought to a successful conclusion

Experience Units: How Long, How Short?

How long or how short should the units be? How much time in the day should they consume?

A basic unit may require up to the point of culmination anywhere from a few days to a year or more. Units that can be begun and terminated within a term are most practical or the first unit may be terminated at Christmas time another by Easter vacation a third at the end of the year allowing for three units during the year. This results in a varying succession of changing themes during the year. Two or more themes may be running concurrently through the term.

Shorter units may overlap with longer ones for example a bazaar project at the holiday season or a timely sale of war stamps. In the lower grades the unit enterprises carried on during the year tend to be shorter than in higher grades though there is no invariable rule. The number of problems to follow at any one time will vary with the circumstances age and grade levels environmental possibilities for the unit and the like.

In the New York City experimental program (35) various alternatives are followed

- 1 There may be one long unit extending over the term
- 2 A series of shorter units of approximately a month's duration
- 3 Several short units covering only a few days e.g. to celebrate a holiday to carry on a War Stamp Sale
- 4 Any combination of units of varied lengths

The tendency today is to have shorter units that overlap or run consecutively rather than a single long unit occupying a term or a year as was more customary a few years ago.

All the children within a group do not engage in every unit for there are occasional small projects in which not all are interested and with which only a small group need be concerned. Certain problems may be the concern of only a few individuals or a single child. Some problems will cut across several age levels allowing children from several grade groups to work cooperatively on one theme.

Unit Projects Need Not Consume the Entire School Day

Not all the work the children need to do can ordinarily be encompassed within a single unit. Even the most comprehensive unit would leave children short in basic skills. Not every desirable phase of school learning can or should be related to the units. The integration of *all* the day's activities in broad units is not advocated because there are many incidental projects and emergency situations to be provided for, and specific needs to be met that cannot be anticipated far in advance. It is far better to attack these problems directly as separate projects so long as they are meaningful to pupils. The South

American project carried on at Lincoln School, which was referred to above, consumed about an hour a day, on the average. Other units require much more time, some may take even less.

Crosswise and Longitudinal Integration

In the crosswise integration of such a field as English with other areas the program may lose something in longitudinal, sequential articulation in subject matter. For example, in alliving English literature with a study of South America, some things of value from the English classics may have to be omitted. This is a recurring problem which can be met only through comprehensive planning by those who prepare the curriculum.

Longitudinal articulation in the sequence of units from grade to grade is taken care of by over all central committee planning. Though the same theme may appear in successive grade levels, e.g., cotton, aeronautics or Indians, these topics are developed in harmony with the maturity of the pupils at different levels.

The plan for learning sequences at any level considers what has gone before and what is to follow, insuring continuity without duplication of content, and assuring the development of experience units harmonious with the child's broadening interests and increasing maturity. Children are less inclined in unit teaching to conclude at the end of a unit that they have 'finished the subject'.

Overlapping in unit activities is prevented through teacher planning that takes into account the program carried on in preceding years.

Planning and Developing the Units

In regard to planning and developing curriculum units there are two schools of thought: the one advocates considerable pre planning by curriculum committees and the teacher. The other allows more largely for pupil initiative in selecting problems for study under teacher guidance and the development of the plans day by day. The work is not planned in detail far in advance of the time it is to be carried on.

Suggestions to teachers for selecting and planning experience units have been listed by the New York City Schools Planning Committee (35). These are as follows:

- 1 Set up suitable objectives
- 2 Decide on the approximate duration of the unit
- 3 Find an interesting and suitable approach

- 4 List the desirable experiences or activities that can be set up to realize the objectives selected
- 5 List the suitable subject matter concepts and skills that may be developed in the unit
- 6 List materials that will be needed
- 7 Plan tentatively for some desirable culmination or summary of what has been learned
- 8 Plan tentatively what appraisal in terms of tests records and other evidence will be needed

In unit activity teaching at the P. K. Yonge School Gainesville, Florida (41) the units are initiated planned and carried on largely by the pupils under teacher guidance. Questions and ideas arise content emerges as the pupils plan and work on challenging themes. The impetus for developing the project comes from within the group. Together teacher and pupils initiate the unit plan the activities set up the program select techniques needed to carry on the work determine the resources needed for the project obtain the necessary materials make reports of findings and results and appraise outcomes.

With unified teaching the teacher becomes the actual curriculum maker making tentative plans for the activities to be carried on but holding final plans in abeyance until teacher and children together have explored the many possibilities for interesting developments. No set pattern for developing the unit is followed. After the first tentative planning new possibilities emerge as the activities get under way.

It is unsafe for teachers to plan units in any detailed fashion too long in advance or apart from the children who are to undertake the study and should themselves participate in the planning. A teacher may have plans for a particular unit well worked out as one second grade teacher did before the opening of school in the fall only to find that the children's anticipated interest in trains did not materialize. Instead the children's continual comments and questions about the newly constructed airport in their vicinity forced a switch to air planes.

On the one hand there is considerable planning to be done with the children after the unit theme has been selected on the other there is considerable ground work to be laid by the teacher apart from and ahead of the pupils.

Detailed planning is essential when boys and girls work as they so often do with raw materials and problems that are entirely new to them. How far would a primary grade group get with its beek-keep-

Composition

Oral and written

Discussing and planning the unit

Reporting as committees

Evaluating the work done

Reading, writing, telling stories and poems

Health

A study of the value of fruit as food

The making of posters

Practical arts

Planning and constructing the buildings

Making a plan for their arrangement

For their final program the pupils made and gave a play, and took parts illustrating the work done by each worker, e.g. truck driver, packer sorter label man box maker, inspector and so forth. They invited the first grade and later, their parents to see the play.

Food Study in the Fifth Grade

The way in which a study of foods originated and was carried on throughout the year by a fifth grade class is told by Elsie Mabee (22). A problem arose when it became necessary for the pupils to bring from home or prepare at school their own noon lunches. When the matter was discussed in class many suggestions were offered. The problem was considered over the summer, and in the fall the children returned to school with many suggestions. The necessary equipment for preparing their lunches was obtained. Together teacher and children planned the first day's lunch. Later, committees in the group took turns preparing the lunches. In view of many other pressing interests, preparation of the lunches consumed only a small part of each day's time.

This project quickly led the pupils into a serious study of the food requirements of growing boys and girls. The children discovered that what they ate played a definite part in their growth, and that good bones and sound teeth depended upon a balanced diet. Planning lunches became a matter of choosing the foods that would help meet each child's daily nutritional requirements. Their desire to own their own stove was realized when they were able to purchase a stove with contributions from the earnings of the class.

Each child financed his own lunches, an individual problem in budgeting for each. All the children took turns throughout the year in planning, marketing, preparing the food, serving the lunches, cleaning up, and in keeping the class within the budget.

This interest in preparing their own lunches led to a nutrition study with animals. Cages were constructed for rats, mice, and guinea pigs, with each receiving controlled diets. Daily the children weighed the animals, recorded results on charts and graphs, and kept diary growth records. They studied the effects on chickens and rats of a limited amount of sunlight and a ricket-producing ration. They compared the results of a milk containing *versus* a no milk diet for white rats and chickens. The effects of sugar and meat in the diet were tested out with rats. Guinea pigs and rats were used in testing diets that were high and low in vitamins A and C.

Simple laboratory equipment was set up to analyze the chemical contents of foods. Most of the equipment came from home, including children's commercial chemistry sets. Among the seventy or more laboratory experiences which these children had during the year were the following:

Making cultures of bacteria	Testing to determine the freshness of eggs
Growing and observing molds	Experimenting with iodine
Testing water	Distinguishing acids and alkalies
Making a fireless cooker	Making soap
Observing circulation of the blood in a live tadpole	Making oxygen
Observing the structure of the teeth	Testing saliva for alkaline or acid reaction
Examining the structure of animal bones	Testing the effects of cooking on digestion
Studying the composition of bones	Discovering facts about air and water pressure
Finding calcium in bones	Studying the properties of water, heat
Testing foods for starch, fats, proteins, mineral content, calcium, sugar	
Preparing casein	

The desire of the group to grow food for their lunches led into new experiences with gardening. They made and cared for a garden, experimented with plants and soils, visited a greenhouse, heard a farmer explain rotation of crops, studied the growth process in plants, studied the similarity in structure between plants and animals, observed the effect of lack of water on plants, gained an understanding of man's dependence on plants for food, fuel, clothing, and shelter, and on animals for food, clothing, and service.

The children kept individual records of personal improvement in health habits such as sleep, play, rest, food, and scored themselves in an attempt to improve. They kept records of their physical measurements, dental care, disease prevention, outdoor activities.

The pupils made graphs or charts illustrating food values, individual food needs, daily energy allowance for boys and girls, early man's food resources contrasted with present day resources. They arranged sample exhibits of foods such as meat substitutes, foods to eat raw, laxative foods, and those rich in vitamins. They prepared a report of their experiences and findings to present before a teachers' meeting.

During the food study, individual children made many community contacts, and reported their findings to the group. They visited vegetable, fruit, fish, and meat markets, a delicatessen, grocery store, restaurant, and hotel. They found out, through the City Hall, what the city and state do about food inspection. They visited a refrigeration plant and learned how foods are stored at different temperatures. Visiting food markets impressed the group with the importance of protecting foods from exposure to flies.

This led them into campaigning for food sanitation, a study of garbage disposal, and questions about their own water supply.

On a number of occasions the children enjoyed entertaining guests at luncheon. If any single activity could be considered the culmination of the year's work, it was a luncheon party given for the mothers of the group for which the children assumed full responsibility.

Following the luncheon they told their visitors about their study during the year, with each child taking some part.

The teacher observed growth shown by the pupils in gaining new understanding of the physical and social world surrounding the children, in power to do some constructive and critical thinking, in creative expression, in group planning and investigation.

A Unit for the Middle and Upper Grades

Logging and Lumbering.—In undertaking this unit, the pupils first went on a hike to the woods to collect bark, leaves, cones, and branches from trees in the district. Written reports of their excursions were made and mounted in booklet form. They found out which trees were used in the lumbering districts, obtained material from government offices, the Department of Forestry, etc., and sent to paper mills for other information. They went to local lumber offices for samples of wood, visited a local logging mill, and watched lumbering processes. Pictures were taken and the different terms used were written down. A sketch of the mill was made for future reference. The children nearly wore out the weary loggers with their

questions Thrilling rides by 'speeder' to and from the mill added excitement to the outing

The children decided to make a logging camp in the room with the girls just as enthusiastic as the boys about their study Parents sent books snapshots supplied transportation and were helpful in many other ways

Finished lumber sent from the saw mill and the lumber company was studied The children learned what it was used for and how the different kinds were used A pulp and paper mill was investigated The local forester brought in a display and showed a motion picture on the woods and our forest friends and talked on the care beauty and wealth of our forests He showed how forest fires started and the destruction they cause Children made Prevent Forest Fires posters

Tugboats and waterways were studied A small model of a tug and a boom of logs were constructed The coast of the country was studied from maps The pupils themselves made a large map with the ports located on it The kinds of trees in each area were indicated and the lakes used for logging Poems about trees were collected and put in a booklet Maps and pictures were mounted in rustic wooden covered albums Rustic book ends were made from various kinds of wood bracelets and necklaces were made from cones nuts and seeds Songs about woods and trees were collected and learned

At the close of this unit a tea and display of work on the projects was held for parents and friends Activities in the project related to skills and content subjects were

Arithmetic lumber measurements height of mountains measuring for camp buildings the distance logs were towed
Reading Booklets pamphlets furnished by the government reading and giving reports on related topics
Spelling terms used in the industry spelling in connection with writing

Language and Writing giving reports writing letters
Geography waterways mountains rivers and lakes cities and ports
History when logging began in the region
Science scientific terms in industry coniferous and deciduous trees life in the forest life in the stream the kinds of trees bark and leaves

Music songs birds
Art sketches posters drawings and designs
Practical Art building projects costume jewelry papier mache molding building a cupboard
Gardening planting seeds and setting out trees obtained in the woods

The teacher considered this the most interesting and enjoyable project she and the children had ever developed. The time allotted for it was only two afternoons a week, but the teacher found that it was hard for the children to go out for recess on those days because of their interest, and they never were willing to leave until the bus horn sounded at night. This class was still required to carry on with the three R's in the morning, and the activity was accounted for as a practical arts project.

QUESTIONS AND TOPICS FOR STUDY

- 1 What are the chief criteria to be considered in the selection of teaching units?
- 2 To what extent should children's interests and immediate concerns prevail in the selection of units?
- 3 How can the proper sequences in the units chosen for study be insured throughout the grades?
- 4 How can children's immediate concerns be tied to broader social problems (e.g. health) through unit studies?
- 5 What safeguards must be adopted to insure the success of teaching by integrated units?
- 6 To what extent should the details of unit teaching be worked out in advance of the children's introduction to the unit?
- 7 How much detailed lesson planning is needed in activity teaching?
- 8 To what extent should the pupils participate in planning their own work in connection with units and projects? Under what circumstances might a teacher step aside and let pupils do the planning?
- 9 Can several units or activities be carried on simultaneously? Under what circumstances?
- 10 What are the various steps to be followed in carrying out a unit of work?
- 11 What do trips or excursions contribute to the child's learning? List advantages and limitations.
- 12 Select some unit topic, indicate the age or grade level of the pupils who are to work with the topic, draw up tentative plans and work out details for teaching the unit.
- 13 Write out several other questions and topics for study.

REFERENCES

For references on this material see list at end of Chapter 6

Chapter 8

THE PROGRAM FOR UNIFIED TEACHING

Every teacher who has experimented with unified teaching soon discovers that the *daily time schedule fundamentally* affects the nature of the activities that can be carried on as well as the teaching procedures that can be used. Teachers realize too that there are many factors such as the length of the school day, the distance children have to travel to and from school, the matter of bus schedules, the length of the school year, the prevailing climatic conditions, the extent of home and school cooperation that have a bearing on the type of daily schedule set up.

The schedule for *formal subject teaching* could be worked out in advance for the entire year without the necessity for any marked deviation. Today in harmony with the trend toward unified teaching teachers are given considerable freedom for developing a flexible daily time schedule. Teachers find it difficult to fit the program to the requirements of the children if they must follow a course of study that others have worked out in full detail in advance. In fact unified teaching in the fullest sense is impossible unless teachers are given authority to work out a schedule to fit emerging activities connected with the unit. Intelligent planning for the economical use of time each day to carry forward projects under way prevents haphazard work in unit teaching.

All school scheduling will still be required for any activities that must dovetail with the program for rooms, equipment, or use of the instructional staff that must be shared with other classes in the school, e.g. the gymnasium, services of science teachers, and the like.

The school program, day by day and week by week, should provide for all the child's essential aspects of living, including physiological requirements for rest and recreation. Fundamentals to be scheduled for school children in the age levels six to sixteen or eighteen should include

- 1 Gaining experiences and acquiring knowledge in connection with basic problems in daily living
- 2 Having social experiences in the group

3. Gaining acquaintance with the world of science
4. Technical experiences: language .(writing and talking, reading, spelling) handwriting, arithmetic, the use of tools and equipment
5. Expression through the arts and crafts, music, literature and drama
6. Experiences in building and making things
7. Play, games, exercise and recreation

The day's events may be blocked out under such headings as :

Getting ready for the day's work	Skills periods
Planning the day's work	Periods for recreation and relaxation
Work periods	Periods for self-expression
Conference periods	Checking at the close of the day

The Virginia course of study (14) lists the following essentials of a well-balanced educational program for elementary school boys and girls :

Routine and maintenance activities	Creative and cultural activities
Work centering around social problems	Physical education
	Practice in the skills
	Solution of personal problems

No uniform time allotments can be assigned to each of these activities in advance for the entire year because each school, in fact each class, needs to develop its own schedule according to its requirements.

Newer Trends in Scheduling

Since rigid schedules with short periods of arbitrary length are not suitable for unit teaching which requires longer time periods for exploration, experimentation, and construction activities, the newer time table is more tentative and has fewer brief periods marked off by class bells. Teachers and pupils together plan the schedule, determining the amount of time needed for the various activities, maintaining balance among the many activities, and allotting the available time to best advantage.

Having shared in planning the use of their time, the children are then obliged to stick to their plans. They adjust to meet emergencies that require changes in plans, and begin quite early to appreciate the consequences of failure to adhere to a time schedule. Scheduling the use of time and meeting definite commitments proves to be a learn-

ing experience for children that helps to prepare them for efficiency in adult life

— In general only those activities are regularly scheduled in advance that involve the use of space or apparatus that must be shared with several classes in the school such items as the playground gymnasium shop and equipment for arts or music. In some schools at least part of the day's activities will be definitely assigned for these activities. For the rest of the day the written schedule serves chiefly as a general guide instead of a pattern to be slavishly followed. Not every minute need be allocated in advance to some scheduled work though tentative assignments are made for the month week or day. The scheduling is flexible so that adjustments can be made. The progress the pupils are making in various enterprises determines the time allotments for a given day or week. One day's work may not be very similar to that of the day before because it must represent a development from the previous day's activities. The daily schedule is planned in the light of the activities to be carried on e.g. the entire morning on a certain day may be given over to work on the class play.

With a flexible schedule it is possible to introduce current features as need requires the Red Cross drive Safety Week the milk crusade an unusual broadcast or musical event without upsetting the whole week's work or the day by day schedule.

The new trends in the daily schedule may be summarized as follows

- 1 Blocks of time double or treble the usual amount of time reserved for lessons in formal subject teaching are scheduled for planning and working on unit activities. A short period is disadvantageous because it requires a fresh start later with much lost motion.
- 2 There is more flexibility in the program to allow for shifts in emphasis temporary problems new features which may develop from day to day.
- 3 There is more variability in the program from day to day and week to week but changes that would interfere with the smooth functioning of the entire school are arranged through the central administrative office.
- 4 There are more periods during which the individual children within a class group work at different projects.
- 5 The nature of the particular program worked out depends upon the ages of the children the time of year and local conditions.
- 6 Instead of strident bells whose jangle interrupts work at inconvenient times there is a large well oiled clock in plain sight which

both children and teacher consult. In fact the children assume responsibility for indicating the time previously determined upon to terminate a work or study period.

Illustrations of Daily Schedules

The contrast between the conventional schedule with many brief, rigidly scheduled periods and the more flexible program for integrated teaching is shown in the following illustrations, both for third grade.

CONVENTIONAL

8 45	Inspection	11 15	Correct form
9 00	Assembly	11 25	Music
9 15	Number drill	11 50	Memory
9 25	Mental arithmetic	12 00	Lunch
9 30	Phonics vocabulary	1 00	Inspection
9 40	Written arithmetic	1 15	Penmanship
9 50	Spelling	1 35	Supplementary reading
10 00	Reading	2 00	Sewing
10 40	Civics	2 30	Word study
11 00	Recess	2 50	Form gymnasium
		3 00	Dismissal

Also in the schedule for various days of the week are short periods for

Hygiene	Oral reproduction
Ethics	Nature study
Sentence structure	

THE UNIFIED PROGRAM

8 45	Plans and activity connected with the unit of work or project (Monday, Tuesday, Thursday), Fine arts (Wednesday); Cooking (Friday)
10 30	Physical Education (Monday, Wednesday), Rhythms (Tuesday, Thursday, Friday)
11 00	Individual work of varied types (daily), Arithmetic (daily) to meet individual requirements
12 00	Lunch followed by rest
1 00	Story hour or recreation (daily)
1 20	Reading or library (daily except Friday), Science activities (Friday)
2 00	Spelling, writing, and written composition according to individual interests and needs, chiefly related to the unit of work
3 00	Dismissal

INTERMEDIATE AND UPPER GRADES

The program in another school is as follows

- 9 00 Health check up
 - Reports
 - Planning the day's work
 - Social studies and natural science
 - Recess
- 10 35 Creative activities and appreciation in art, science, and literature
- 11 15 Writing, numbers and language skill
- 1 00 Arts and crafts
 - Construction and dramatic activities
- 1 45 Reading and language experiences
- 2 20 Individual or group work as required
 - Diagnostic work, testing, and remedial practice
 - Free activities for some pupils

Such schedules are considered as guides rather than routines which must be slavishly followed day after day

The fact that learning skills is more successful when practice comes regularly, day after day, suggests the need for providing time in the daily program for systematic practice and consecutive drill in the skills areas. This does not necessarily mean holding to the same daily practice plan for an entire term, or the same length of drill periods for all the children in a class, nor is the assumption to be made that learning skills takes place only in isolated drill periods.

Seay (10) gives illustrations of the flexible daily schedule in which there is a constant general pattern

- Free period, work period, play period
- Lunch
- Rest
- Work period

An illustration of daily scheduling for a sixth grade unified program centering about the study of Latin America will be found in *South of the Rio Grande* by De Lima, Francis, and Baxter (3)

The Board of Education, New York City, is publishing a series of schedules (twenty or more) that teachers have worked out. Illustrations of the teacher-planned daily program for unit activity teaching are given in the New York City Schools Curriculum Bulletin (13)

In the P. K. Yonge School, Gainesville, Florida, the daily schedule is flexible, to be altered as needs arise except for the regularly scheduled music, fine and industrial arts, and gymnasium periods which are taught by special teachers (20).

The first hour in the morning is usually the best time for planning the day's work, for the children arrive at school brimming with ideas and bringing materials to work with. Discussion of plans thus comes at the time when it has most value. Upon completion of the planning, a list of things to be done is placed on the blackboard so that pupils will know the schedule without the teacher having to remind them.

Other examples of the freer daily schedule are given by Roma Gans (5), John Hockett and E. W. Jacobson (7), Martha Porter (9), Margaret Gustin and Margaret Hayes (6).

In the high school as well as the elementary grades, longer blocks of time than the usual 40-50 minute period are allowed for the full development of topics, for laboratory experimentation, workshop activities, demonstrations, and observation.

No "Extras" in the Program

In the newer school there are no "extra" or "special" subjects or periods, no unsupervised recesses. There is no such thing as being "excused from" regular work to take on something extra. There is nothing that is supplementary or "tacked on." All the child's activities are a planned part of the daily and weekly program. No one phase is considered more or less fundamental than any other. The child's entire school day time is under teacher supervision, including the lunch hour if children remain at school for lunch.

Formerly, some things had to be considered extracurricular because very few participated and the work had to be done after the regular school day. These extracurricular activities are now planned as a regular part of life in the school. They are essentially School Life Activities. Rehearsing a play, planning a school "drive," practicing in the band or orchestra, holding a committee meeting, need not be considered extra work for which children must be excused from something else. "Excusing" would be necessary only when certain children must go to another school building, or to private instructors outside of school. Unless this attitude toward the total program is adopted, teachers cannot plan a well-rounded experience for children at school.

Schools in which the total day is continuous, not punctuated by a hurried trip home for lunch, have a certain educational advantage,

for not only can lunch be made an educative feature but time is added to the day for supervised rest periods or story hour discussions, and the like. With the many demands that compete for time in the school day, the unified program may become as overcrowded as the traditional schedule. The teacher guards against this tendency by combining overlapping activities and cutting down on nonessentials.

Unified Teaching and the Separate Subject Course of Study

The dilemma of many forward looking teachers is how to reconcile unified teaching with the printed course of study designed for conventional teaching that they are still required to follow. Until administrators cease demanding that teachers follow the "subject course of study, unified teaching can never be more than a halfhearted compromise. Teachers can scarcely be expected to carry on both unit studies and comprehensive subject teaching simultaneously. There is lost motion in artificial correlation of subject matter. Adding experiences as extracurricular subjects leads to overcrowding of the curriculum, excusing pupils for a half day a week for a trip or activities under the guise of practical arts is only a faint gesture toward unified teaching.

In some communities the law requires that a minimum of 50 per cent of each school week be devoted to reading, writing, language study, spelling, and arithmetic. These skill subjects are studied in the morning with activities and projects in the afternoon. The limitations of this arrangement follow:

- 1 The suggestion is given that curriculum units with all their rich content are less important than skills or do not include skills.
- 2 The arrangement prevents planning by pupils early in the day resulting in delayed enthusiasm and possible loss of interest especially since children tend to bring fresh ideas to school the first thing in the morning.
- 3 This arrangement may prevent practice of skills in purposeful problem solving resulting in impermanent learning and loss of time.

The only advantage in the arbitrary scheduling of skills for half a day is the assurance that essential skills will be taught and practiced systematically. This arrangement is unnecessary when teachers plan a well balanced daily program for their pupils.

Cooperative Planning for Unified Teaching

In subject teaching it has been customary for the central educational authorities to outline the course of study, draw up the program

to be followed, and prescribe the texts to be used. Teachers were expected to conform to the prescriptions handed down. Unified teaching calls for greater teacher participation in planning the course of study and making the program. The teacher has greater autonomy in selecting learning experiences for the pupils, in determining the subject matter to be taught, in choosing materials, and in planning the daily and weekly schedule. Concentrating more authority locally in the hands of the teacher enables the school to come closer to meeting each pupil's needs. Curriculum outlines drawn up represent the cooperative effort of administrators and teachers, in some cases, of parents, local citizens, and the pupils themselves. The outlines prepared in advance tend to be general in character, and to stress general principles in selecting subject matter and organizing the daily program, rather than to dictate blanket prescriptions that every teacher must follow. They provide for flexibility in planning so that local adaptations can be made in teaching.

In the New York City experiment (12), each school was made responsible for the organization of courses and the program to be followed. Freedom was granted the teachers working with the principal to develop the educational program that each school required.

Several principles of curriculum making, as practiced in Virginia illustrate the new trends (14)

Any effective program must originate in the school and community where it is developed

Course of study materials should be used flexibly by teachers in local situations

The fact that the capacities and backgrounds of children vary, that teachers themselves vary in skill invalidates any arbitrary listing of grade accomplishments or subject matter to be covered within a given time

Freedom is allowed the teacher in developing the classroom program. Unified teaching and subject areas organized around core themes are advocated

According to a recent report from schools in England (4), uniform curricula are not adopted, instead, the school authorities in each community encourage teachers to experiment with new subjects, methods, and techniques. Many rural schools build their curricula around such local industries or neighborhood crafts as gardening, poultry raising, the care of pigs, goats, rabbits, bees. Projects are planned in weekly units and provide a large degree of flexibility.

A distinction is made between long and short term planning. The former tends to be more general, with planning done by curricula

lum committees, in the latter, work on projects is planned by teachers and pupils together

The fact that teachers need training and experience for intelligent participation in curriculum making is recognized through setting up in-service training courses and curriculum workshops. The teacher training institutions, as well as school administrators, recognize the need for a new type of teacher who can take the initiative in developing his own classroom programs, who can learn the technique of working and planning with other staff members isolate problems for study, set up study groups, and gather materials

The Work of Curriculum Planning Committees

Outlining the curriculum for subject teaching with courses built around a single text is a relatively simple matter, but for unified teaching a different kind of planning is done. The most satisfactory arrangement, now widely adopted is to delegate responsibility for curriculum planning to committees of the school staff. These committees consider such matters as preparing outlines for projects, determining criteria for the selection of units, exploring community resources for unit materials, determining the place of the skills in the total program, gaining community cooperation for enriching the program and evaluating visual aids. They work on grade placement, organization, and sequence of content, as well as textbook selection

In most communities where teachers participate in curriculum planning the committees meet frequently to work report and share experiences. Accounts of successful programs are distributed and evaluated. These committees do not attempt to draft a detailed course of study to be uniformly adopted. on the contrary, they seek to determine, by a study of a teacher's methods and results, the practices that have worked most successfully at various grade levels and with different types of children, and to facilitate the interchange of ideas on teaching, development of units, pupil guidance, and other related topics

Although committees representing separate content fields—the social studies, mathematics, reading, English, science, crafts, health, music—are essential to develop sequential learning experiences in these areas, comprehensive planning committees are needed to consider the total learning experience of children at various age levels, e.g., six, ten, or thirteen. The advantage in having teachers participate in over-all curriculum planning committees, rather than to have many divisions along subject-matter lines (committees for the social

studies, for health, for arithmetic, and the like), is that departmentalization is avoided and unified teaching is more likely to result. In "cross-cut" planning, committee members representing separate content fields are less concerned about having the particular field receive its maximum time allotment in the total program than about insuring maximum integration of the particular area in unified studies so that each pupil enjoys the richest educational experience. This objective seems more difficult to attain in high school, where teachers are highly trained specialists and children move about from room to room, than in the elementary grades where one teacher instructs in nearly all areas; but it can be realized at the junior high school level, as the work of Frances Sweeney, Emily Barry, and Alice Schoelkopf illustrates (11).

New Syllabus Outlines and Curriculum Bulletins

What sort of prepared outline is needed for unified teaching? What description of courses should be placed in the teacher's hands? How definite and detailed should it be? What can safely be set down in advance?

The new trend toward teacher participation in curriculum planning results in syllabi that are resource handbooks designed to assist teachers in working out their own lessons and program. The outlines are general in character, providing both for certain common elements that belong in any school program and for other experiences related to the children's concerns. They contain suggested lists of pupil experiences, unit topics, outlines for enterprises and projects with suggestions for working them out, references to source materials, illustrations of sample units. These outlines give teachers criteria for judging, selecting, and evaluating curriculum content, as well as information regarding source materials and help in appraising the children's requirements in each succeeding class. They contain suggestions for integrating content and skills in unit teaching, for planning the school day, for creative activities, for children's participation in school government and conducting assemblies. There are suggestions concerning excursions, teaching techniques, methods of individualizing instruction, and the needed practice in skills.

These outlines and hand books are considered simply as suggestive guides to be used resourcefully by the teacher; they are tentative, subject to revision as new ideas are tested and developed. With these outlines the teachers of two fifth grades in the same school might work out quite different programs of activities during the year that still would be of approximately equal value in their children's learning

experience. A series of such teaching handbooks for elementary education, designed to take the place of the more traditional courses of study, has been prepared by teachers working on curriculum committees in New York City (13).

The great advantage of these new syllabi, or curriculum guides, is that they insure a dynamic, flexible curriculum. Timely topics can be introduced when the children's interest is keenest. How many of the syllabi, drawn up ten years ago, contain lesson plans or content on Latin America and the "Good Neighbor" policy? On 'tolerance' or 'world unity'? How many have anything on streamlined trains, plastics or living in the Air Age?

A curriculum committee in a progressive Western community was set up to study the value of creative writing for elementary school children, the ways in which interest in creative writing could be stimulated, and results improved. This effort resulted in a bulletin prepared by the committee which was distributed to all the teachers, not as a set of prescriptions, but as suggestions offered.

The Virginia course of study (14) represents a departure in practice for, instead of being a compendium for the teaching of specified subjects, the volume lists problems that concern children at different growth stages and provides suggestions for children's study of these problems. In this course of study there are sections on

Studying children

Understanding and using the community

Planning and working with groups

Developing the scientific method

Developing creative ability

Using and caring for materials

QUESTIONS AND TOPICS FOR STUDY

1. What advantages exist in a more flexible program not to be found in the traditional curriculum?
2. Contrast the allotment of time in the unified program and the more conventional school program.
3. Make out a sample daily and weekly schedule for unit activity teaching indicating the grade level for which the schedules are intended.
4. Where do the skill subjects belong in the program for unified teaching? How much time should they consume?
5. What are the arguments for and against allotting half a day to skills the other half to unified teaching?
6. What are the arguments in favor of teachers participating in curriculum making?

7. What are the functions of curriculum planning committees?
8. How can an administrator stimulate the staff to take more interest in assuming responsibility for curriculum planning?
9. How can new teachers be encouraged to participate in curriculum planning?
10. What are the advantages of curriculum bulletins in place of a fixed and detailed course of study all teachers are required to follow? Any disadvantages?
11. Write out five additional questions and problems for study

REFERENCES

- 1 Baker, Clara and others *Curriculum Records of the Children's School* Evans-ton Ill National College of Education 1940
- 2 Barnes Emily A and Young, Bess *Children and Architecture* New York Bureau of Publications, Teachers College Columbia University, 1932
- 3 De Lima, Agnes Baxter, Tompsie and Francis, Thomas J *South of the Rio Grande* New York Bureau of Publications, Teachers College, Columbia University, 1942
- 4 Dent Harold C "Britain Stresses the Practical" *School Executive*, 1942, 62, 20 22.
- 5 Gans Roma. *Guiding Children's Reading Through Experiences* New York Bureau of Publications, Teachers College Columbia University, 1941
- 6 Gustin Margaret and Hayes Margaret L *Activities in the Public School* Chapel Hill University of North Carolina Press 1934
- 7 Hockett John A and Jacobson, E. W *Modern Practices in the Elementary School* Boston Ginn & Co., 1938
- 8 Lee J Murray and Lee Doris *The Child and His Curriculum* New York D Appleton Century Co., Inc., 1940
- 9 Porter Martha P *The Teacher in the New School* Yonkers N Y World Book Co., 1930
- 10 S-ay, Maurice F *Elementary Education in Two Communities of the Tennessee Valley* University of Kentucky, College of Education, Bureau of School Service Bulletin. Vol XIV No 3 March 1942
- 11 Sweeney, Frances Barry, Emily F and Schoelkopf Alice. *Western Youth Meets Eastern Culture* New York Bureau of Publications Teachers Col-lege Columbia University, 1932
- 12 *Changing Concepts and Practices in Elementary Education* Board of Superin-tendents, Division of Elementary Schools Board of Education of the City of New York, 1942
- 13 *A Child's Day in School* Curriculum Bulletin New York City Board of Edu-cation, No 6 1943 1944 New York Board of Education 1944
- 14 *Course of Study for Virginia Elementary Schools, Grades I-VII* Richmond State Department of Public Instruction 1943
- 15 "Developing Cooperativeness" *Childhood Education* 1942 19
- 16 *Final Report of the Public School 500* (Speyer School) New York City Board of Education 1941
- 17 *Guiding Principles of Curriculum Development* Board of Superintendents, Division of Elementary Schools Board of Education of the City of New York, 1943
18. Lincoln School Staff *Curriculum Making in an Elementary School* Boston Ginn & Co., 1927
- 19 Lincoln School Staff *A School for the World of Tomorrow* Bureau of Pub-lications, Teachers College, Columbia University, 1940

- 20 *Living and Learning in the Elementary Grades* An Intimate Study of the P. K. Yonge Laboratory School, University of Florida, Gainesville, Florida 1943

COOPERATION IN CURRICULUM PLANNING

- 21 Estvan, Frank J. "Democratic Processes in School Life." *Elementary School Journal*, 1942, 43 143 150
- 22 Hoppock, Anne. "Learning to See to Hear, to Understand." *Journal of the National Education Association*, 1939, 28 248
- 23 *Cooperation Principles and Practices* Eleventh Yearbook of the Department of Supervisors and Directors of Instruction Washington National Education Association 1938.
- 24 "Developing Cooperativeness" *Childhood Education*, 1942, 19 Entire number
- 25 *Guiding Principles of Curriculum Development* Board of Superintendents Division of Elementary Schools Board of Education of the City of New York, 1943

Chapter 9

UNIFIED LEARNING AND THE SOCIAL STUDIES

Subject matter in the content areas—the social studies, sciences, literature, and the arts—has always held a central place in education and continues to do so in unified teaching. Organized subject matter is a resource that contributes to the pupil's understanding, aids in problem solving, and widens his horizons. Formerly, subject matter was valued in the school curriculum for its own sake, today, because it enriches children's experiences.

In the conventional school, subject matter has been treated as a series of unrelated school subjects, each demanding its separate period of time in the daily schedule. The newer tendency is to utilize the content areas as background for unified studies. The broad problems selected for study determine the areas of subject matter to be included and the range of content within each area. This arrangement does not preclude sequential organization of subject matter through the grades.

Not only has unification been effected in teaching the content areas, but changes within the subject fields have taken place. For example, history is no longer viewed as the narrow teaching of facts, in chronological sequence, but as a means to broader understanding of peoples and events.

Any division of subject matter is arbitrary. Who can say definitely where "science" begins and "social studies" leave off? When the pupil's orientation is toward integrated problems, such as "Conservation," "Life in our Community," "Aztec Culture in Mexico," no clear cut distinction between subject areas is possible. And yet, to insure that every important aspect of human knowledge is represented in the curriculum, all subject matter areas need to be considered in terms of the contribution each can make to the pupil's intellectual development.

The principal subject areas are the social studies, history, geography, economics, civics, the sciences, literature, foreign languages, the fine arts, music, graphic art, dramatics, the practical arts, household and industrial, and health education. Each of these areas has

its own specific skills to be mastered as well as content to be studied. Throughout these areas of learning there are interrelationships which need to be considered in teaching.

The proportionate amount of time to be given to the different content areas in the curriculum, according to the best authorities, is approximately one fifth to one fourth for social studies content, which should include social living, and the study of our institutions, about one fifth for science, the study of the natural environment, the physical world, mechanics, and inventions, one fourth for the fine and practical arts, including skills and appreciation, half of the remaining time for literature and dramatics. The child should devote the rest of his time to practice in the skills improvement in reading, arithmetic, spelling, writing and language usage, in high school to mathematics, foreign language, and the like. These proportions vary with age and grade level and with the particular problems that are studied. Something from each of these areas should appear in the child's program each week.

What are the basic concepts to be gained from the chief subject matter areas? This question will be considered as each area is dealt with in turn.

The Social Studies

The social studies (history, geography, civics, and economics) provide a background for understanding man and his environment, the interacting forces of civilization, and their role in cultural progress, the meaning of democracy and human relations. The social studies lead children to appreciate what is culturally valuable from the past, to understand the facts, forces, and relationships of social life as these relate to civic and community attitudes and to problems of citizenship. No single area in the curriculum contributes so much to one's background for competent citizenship as the social studies.

Objectives in teaching the social studies are set forth in the *Fifth Yearbook of the National Council for Social Studies* (28). The guiding principles are

- 1 The development of understanding of the world of men and their affairs, both currently and historically
- 2 The development of desirable individual attitudes and behavior in social relationships that may result from studying social problems
- 3 The development of the right kinds of social interaction

Through work in the social studies pupils gain both skills and information in all these areas.

For children in the United States of America, America, the American way of life, is the focal point about which study and discussion center. Thus pupils can gain an understanding of the evolution that has taken place in social living from the days of bondage and serfdom to those of freedom.

Unified Teaching and the Social Studies

Through what organization of subject matter can the objectives in teaching the social studies best be attained? There are several patterns of curriculum organization which may be adopted:

1. Separate subject teaching: each separate field—history, geography, civics—taught as a separate subject in a fixed daily period, the work in each course being based largely on assignments in a required text.
2. A fusion of history, geography, and civics through unit courses that integrate the separate fields, using a variety of materials from many sources.
3. The development of study topics that have timeliness for pupils and make large demands on social studies content, but overlap at the same time with such other content areas as science, literature, the arts.
4. Giving no direct attention to the social studies in the school curriculum, instead discovering at many points in daily problem solving the implications of social studies content in the problems under consideration.

The first alternative represents traditional teaching. In the second there is something of a compromise between methods One and Three which in turn represents a step beyond the first in unifying content from several areas. The fourth alternative is the least direct and would call for the most skilful teaching for the realization of the objectives stated above. The third alternative is the solution most generally adopted in unified teaching.

There is a tendency in modern teaching, when the third alternative is adopted, to make social studies the core of the curriculum. Equally good arguments could be offered for centering unit studies around science or arts and crafts as the basic core.

Advantages of Integrated Teaching

There is considerable evidence favoring the adoption of fusion courses in the social studies or of unit studies which provide back-

ground in the social studies, as opposed to separate subject teaching in the daily schedule (14)

First among these would be that organized units furnish the best vehicle for learning social studies content with understanding. Unified activities are more apt to teach social values and meanings than learning unrelated facts in subject teaching. For example, in geography nothing sticks very long when learning consists only of memorizing and reciting isolated facts, e.g., the principal divisions on the earth's surface, the names of the states and provinces, all the countries "in order," the capitals, populations of the major cities, and lengths of railroads. Further, such information is not very useful to the learner.

Unit studies depend less on a single text, much more on a variety of source material and personal learning experiences. Sensitiveness to social need and social change is more apt to be gained through firsthand contacts and consideration of current materials than through separate subject teaching with reading restricted to a single text. There is a large place in the social studies field for children to have experiences that originate in their daily living. This is the method by which the pupil best gains realistic social understanding.

Working with materials, as is possible in unit projects and the activity program, makes learning more concrete. There is a decided advantage in mastering concepts in the social studies below age twelve, but these young children are at a disadvantage in gaining new concepts when all their learning in the social studies is confined to memorizing and reciting academic statements in a textbook.

To learn with understanding how the pioneers used flint or to understand the concept of *isthmus* or *continental divide* to know what *cooperation* or *licensing* means, calls for more than textbook reading. These concepts are not gained through a single exposure but must be developed in many situations in order to be learned with true understanding. Lacking the actual opportunity for learning through personal experience, a good substitute is seeing the material portrayed in moving pictures. Then, when the text is read, it will be all the more easily understood for having been thus supplemented by concrete learning.

Another advantage in teaching the social studies through unit problems or projects lies in the larger amount of unbroken time that is provided in the daily program for live projects in this area.

The best results in teaching the social studies are achieved when children show readiness for learning, when the children themselves

help select and plan the units, when teaching methods are adapted to the capacities of the pupils, and when a wide range of instructional resources can be explored by pupils.

In teaching this material, there should be experimentation with materials growing out of concrete experiences, trips, explorations, demonstrations, class discussions, visual aids, arts and crafts. Suitable equipment should be at hand: books, magazines, news-sheets, maps, globes, charts, motion pictures, and work materials. There should also be continuous consultation between the room teacher and special teachers of art, music, and shop work.

Questions for the curriculum makers in the social studies should include: What are the persistent social and economic problems that affect children? How can children be made conscious of these problems? What problems are best suited to various age levels? To what extent should the school make children cognizant of these problems? What is the relative emphasis to be placed upon current problems and historical backgrounds? Answers to some of these questions will be suggested in the sections that follow.

Social Studies in the Elementary Grades

Can children learn about social problems in the elementary grades? The answer is, yes, provided the problems are related to children's familiar experiences and the concepts taught are not too difficult nor remote from childish understanding. Some teachers make the mistake of introducing too many different concepts all at once.

The social studies in the elementary school have two paramount objectives: First, to guide children in experiencing a realistic understanding and appreciation of human relations, and second, to permit children to participate in improving human relations (25).

The beginning of the social studies should be in the "here and now," with the ordinary affairs of home and school life, with the community. From the solution of these problems in their immediate environment, the children will reach out to wider horizons. The emphasis is on understanding of institutions (33).

Through work in the social studies, elementary school children are brought to understand the interdependence of peoples of the local, national, and world communities; they gain some understanding of the growth of our nation; and they learn to appreciate the contributions of science and invention to the improvement of modern living (26).

Economic Competence

Economics, being one of the major factors of all culture, is a field with which the school, even on the elementary level, must deal. Because it can be brought close to the child's experience, and because it tends to bring about better understanding of social and economic conditions, consumer education is one of the most effective methods of introducing the subject of economics, especially in the elementary grades. A further advantage is that such material provides early training that will enable these future citizens to deal more successfully with their practical affairs.

Topics for such study could include the handling of money—buying, budgeting, simple accounting, using and conserving materials, studying the essentials of life—food, clothing, shelter, considering the economic problems related to vocations, health, and cultural and other leisure time activities. Teaching children thrift should be considered as important as any other aspect of economic proficiency and consumer education. No topic is more timely in view of the ever-present need for conserving our stores, for using our resources efficiently, for salvaging waste materials, and for saving to provide both a competence for the individual and capital for the industrial expansion essential to an improving standard of living.

A beginning in economic education should be made with the youngest children. There is, for example, the case of a teacher who saw an opportunity in the sale of War Savings Stamps. One youngster looked longingly at the stamps, but said he could not get a dime all at once. Since he did have a penny occasionally, the school sold him an 'X' stamp for each cent deposited. When this had reached the necessary ten cents, it was exchanged for the longed-for real stamp. Such true to life situations are far preferable to "play" or artificial experiences, even in the first grade.

Human Relations

The school is in a strategic position to enrich the child's understanding of his world neighbors. To deepen the bond of sympathy and understanding among all peoples, units on foreign lands and peoples, on sources of our food and clothing materials are introduced.

Among the numerous opportunities for such constructive unit study might be cited the experience of one teacher. When foreign children in the class were ridiculed by the others it was made into an

opportunity for the entire class to work on "*Our Foreign Neighbors.*" The foreign children brought to class materials representative of their culture, revealing to their native-born classmates a rich culture entirely unknown to them. The hoped for outcome, more friendliness among the children, was achieved. (See Chapter 13 for a fuller description of opportunities in intercultural education and world citizenship.)

Training for Citizenship

The alert teacher inquires: How can school experiences contribute to good citizenship? How can the school, through its work with children, build toward good citizenship for adulthood?

A fundamental objective of social studies teaching is to emphasize social responsibility as preparation for successful citizenship, and for more effective participation in community and national life.

The school gives lessons in democracy, not as political principles to be memorized, but as a way of life, even as early as the kindergarten. Part of such learning is achieved through practice in living democratically at school. Through these school experiences, the child comes to realize that the success of a group project depends largely upon co-operating individuals.

The program in civic education needed by every boy and girl in our country is not limited to one hour a week of lesson learning. Instead, the entire curriculum should be designed to satisfy at many points this need for civic information and understanding.

All phases of civic life are to be considered in such a program: commerce, industry, and civic institutions. These might include: available communications activities, such as are found at railway stations, airplane landing fields, and bus depots; factories and such utilities as power plants and the telephone buildings; shops, banks, the newspaper; the courts, libraries, museums, welfare agencies. (Participation in community projects is considered more fully in Chapter 19.)

Children learn to handle social problems better if they have had school experiences which help them bring about better living conditions within their own school, their homes, and the community. (The ways in which the life of the school contributes to building habits of good citizenship are described in Chapter 17.)

History

History is the study of the past carried out in such a way as to interpret the present and (in terms of general probability) predict the

future. Schools today not only acquaint children with the current scene and the forces at work in our modern life, but teach history as background for appreciating past traditions and culture. School children study peoples, their customs, conflicts, migrations, social and economic development, the forces of social change as a basis for understanding modern times. Studying the past, the forces in our culture, and the results they have produced, helps the student to acquire the necessary perspective to understand at least the essential elements of present problems.

Unified experiences provide more relatedness for the study of history than is possible in separate subject teaching because they emphasize concrete learning rather than verbalization of abstractions. Children relive historical episodes instead of mechanically memorizing dates and terminology. Even in the high school years, when students with their added maturity are more competent to derive the essential facts and principles from reference sources of all kinds, impressions become more vivid and learning more lasting when history is taught as a study centered around realistic projects.

History teaching is enriched when allied with the arts, literature, and science. Two of the most effective means of effecting such alliances are exemplified in projects of one junior high school where the children dramatized episodes from American history and constructed miniature scenes of historic accuracy which were displayed in hall exhibit cases.

Teaching and learning methods, both in history and geography, have been improved by the use of educational motion pictures and excursions to historically important places. What child could fail to be impressed, even emotionally moved, by a trip to New York City's "Bowling Green," now a small man-made canyon surrounded by skyscrapers where the leisurely burghers of a century and a half ago enjoyed the peaceful game of "Bowling on the Green"?

History ceases to be a dull, dry subject when it is taught with plenty of such anecdote and illustration, or through tales of adventure.

American History.—American youth needs to know how the countries of the Western Hemisphere came into being, how they grew, how the basic ideals that built the democracies and created the American way of life evolved, and what it means to live under our flag. They need to study the principles of liberty and justice upon which their country was founded and to absorb the lessons our country has to teach other nations. They should become familiar with

our country's institutions and the notable people who contributed to them

The systematic study of American history deserves a place in the curriculum from the earliest years, not as a list of facts to memorize, but as a way of life. When children are sufficiently mature, the facts and generalizations of American history can be learned in a short time.

Geography

In the world today it is difficult to overestimate the value of geography. Through aviation and radio communication the world has shrunk so that it is rapidly becoming a global community. Barriers have been broken down, geographic obstacles to communication have been eliminated. To land and sea geography has been added the new geography of aviation.

Geography is the study of fundamental social and economic problems. The student learns about the social and economic controls affecting a region. The concepts may include, for example, the relation of natural resources to the terrain, understanding people in terms of the territory they inhabit, the importance of climate in determining man's activities. Such questions as the following may be considered in connection with unit studies:

What has been the influence of natural features of the earth on communication and transportation? Why are crops in many parts of the West dependent upon irrigation? Why have London, New York, Buenos Aires become such large cities? Why was it difficult to establish naval bases in the Orient? What is the food supply in the teeming Oriental countries?

Through the study of geography children come to understand that soil, climate, minerals, altitude, and latitude affect the productivity and wealth of lands. Such study must be focused on the use and properties of lands and regions. This is particularly true if children are to learn about the interdependence of peoples. Geography can contribute toward the development of understanding, of tolerance and of cooperation when teaching is focused on vital problems that concern us in our daily living.

The study by pupils of their own immediate geographical environment may be more beneficial to them at a particular time than the study of Europe, Asia, South America, or Africa. From grade to grade, geography should reveal ever widening horizons.

Americans are held to be lax in geography, despite the fact that geography was one of the first "subjects" introduced after the Three

R's, and even though geography has been systematically taught in American schools. The reason is that geography is too often learned by memorizing verbal statements in texts rather than through studying problems centering about understanding the world its peoples and subdivisions in terms of climate and natural resources. Geography is best treated not as an isolated subject but as a series of concepts to be introduced in many study topics.

The Study of Maps—A teacher inquires, "At what age are children ready to use maps? I feel maps would be helpful in connection with our Indian project, to indicate where the Indians lived and so forth, but I do not want to make the study too complex for them." The answer is that maps can be used successfully in conjunction with related materials when teaching children as young as seven or eight. These maps should be simple outlines, either in black and white or in vivid colors.

In one project, eight year olds were developing a unit on sugar. A movie was shown illustrating sugar production including an animated map of the world that reappeared at intervals illustrating various facts about sugar, such as the parts of the world in which the cane was grown. The children showed a lively interest whenever the map appeared exclaiming whenever they identified North America pointing out Hawaii, and other places they recognized. Such animated maps are a great boon to the teacher since they are simple and dynamic, and the movement holds the attention of the children.

In higher grades, the study of maps and map making has a large place in the modern school. Map making is important, for it affords another means of learning by doing.

In its study of South America a sixth grade made a large mural of Peru for their classroom as well as relief, climate and products maps for all the countries of South America (5).

Social Studies Through the Grades

No one pattern for sequences in social studies units through the grades can be outlined to fit all schools. In fact the advantage of unit teaching in social studies is that the units can be made to fit the communities in which they are developed and should be suited to the maturity of the children working with them.

Descriptions of social studies units that have achieved basic objectives in this area will be found in references 5, 7, 10, and 16.

At the Lincoln School of Teachers College, New York topics that were developed as unit studies in the elementary grades include

Six-year-olds: Helpers in the community, the grocer, policeman, fireman, postman, street cleaners, etc.

Seven-year-olds: Communication and transportation.

Eight-year-olds: Old New York (local history).

Nine-year-olds: Workers of the world. Dealing with world environments important in present-day living and presented simply enough for children's understanding, such as through units on production of sugar, rubber, gasoline.

Ten-year-olds: The westward movement in the United States. Science and invention.

Eleven-year-olds: Latin America.

First year of junior high school: The Far East.

The following summary indicates the types of social studies units that have been worked out at various grade levels in a number of schools (12, 16, 25, 26, 27, 34, 36).

Primary Grades.—There can be exploration in social science even for beginners who are primarily interested in their immediate environment. The children's interest is aroused in airplanes, automobiles, trains, buses, street cars, elevated trains, subways, or boats. They may create in the school room a post office, store, train, playhouse, making believe that they are the workers or inhabitants. The horizon gradually broadens as they take excursions downtown, or trips in a ferry boat, tunnel, bus, car, subway, train, or across a bridge.

Second Grade.—The seven-year-olds are ready to explore wider environments of the city and country. Increasingly the "Why" and "How" of the busy world and its workers, and the complicated processes the child sees going on all about him, call for interpretation. There should be trips, such as to a farm, market, pasteurization plant, which increase the pupils' knowledge of sources of food, and other pertinent information.

Trips to observe boats and trains carrying food, mail, and passengers, stimulate an interest in transportation and communication. Through discussions and questions, pictures and books, the child begins to gain social understanding and to establish relationships.

A miniature city can be created by the children and well organized dramatic play of city or rural life carried on. Children should do the actual building and dress the dolls in appropriate costumes to represent workers and their families.

In studying New York City and its different centers of interest at one school in the city, there is frequent reference to the past to clarify

the present Activities and modes of Old New York are compared with those of the present

The maturity of the group, their previous interests and experiences, and their present needs indicate to the teacher how to organize the unit activities from year to year

Following trips and actual personal experience, many activities develop which enrich the social studies content Drawing maps and doing science experiments are related activities

Third Grade.—By this time the eight-year-olds have accumulated an appreciable body of information about their immediate environment and are psychologically prepared to project their interest into the more distant past and the unexplored They eagerly approach a study of primitive people, Indians, Cave Men, and Tree Dwellers Primitive ways of living are understood and enjoyed dramatically, although contact with the present is never lost Interest in the immediate environment continues Trips to the museums are more frequent

Favorite topics for New York City children include boats, foods, our island our city, primitive people, other lands, pre historic men and animals, transportation then and now, modern inventions

In one third grade Indian study, children learned about foods in their diet that originated with the Indians, and the games that they taught the early settlers

Middle and Upper Elementary School—Nine-year-olds in New York have studied the story and history of the evolution and development of transportation on Manhattan Island, which was a phase of their study of the growth, development, and history of invention and industry in the world A wide range of activities was engaged in, the pupils gathered informational materials from many sources, including the school library, trips, museum materials, and the study of maps They made a map of the region and planned a play on evolution of transportation

Another group studied foods and the story of the earth In the latter, both science and social studies appreciations were gained "Early Man" proved to be a theme rich in social meanings

Children have gained not only social understanding as well as historical and scientific knowledge, but rich aesthetic values and experiences from these studies as well

The middle- and upper grader enjoys going places and "being" other people than himself Hence a topic with invariable appeal at this age is "Pioneer Life," how people lived and struggled and ex-

explored in the days of Daniel Boone, Lewis and Clark, the '49ers and the Pony Express. Such topics cut across the study of history, literature, geography, science, natural resources, the arts and dramatics. Through them, pupils learn about manners and customs in other times and places.

A group of ten year-olds studied the development of transportation in America in pioneer days and in modern times. Culminating ideas were expressed in dramatic form. From experiences growing out of the unit emerged various historical, social, geographical learnings, and many new concepts. They gained an appreciation of increasing speed in transportation, familiarity with outstanding figures in American history, better understanding of the complexity of life today as compared with the simplicity of life in other days, knowledge of the contributions of the Old World to the New, better understanding of what life was like in olden times, knowledge of geographical divisions of the United States, the relationship between climate and topography, vegetation and animal life, the westward march of the people, in other words an appreciation of how the American has changed himself and this country.

Older children studied the contrast between life today and living in our great grandfathers' time. Answers to such questions as "What advantages and disadvantages have resulted from these changes?" were sought.

Readings and class discussions stressed the machine and what it has done for us, effects of science upon the supply of materials, our loss of independence, complexity of life today, the phenomenon of advertising, sales pressure and resistance.

In connection with the topics indicated above, children developed individual or small group projects on such topics as silk, railway engines, ships, sources of power, the telephone, the telegraph, story of iron and steel, map making illustrating iron ore deposits.

Another group of eleven-year olds discovered "How man has developed and improved the great necessities of modern living." This unit topic was suggested by the group. Some examples of sub topics developed were: Communication (speech, writing, telephone, telegraph, radio, television), transportation (animals, trains, automobiles, airplanes), fuel and power (wood, lumber, oil, coal, electricity, water), food (farming methods, old and new, farm machinery, methods of storage, transformation of foods, milling), recreation (games, theater, hobbies, driving), clothing (cotton, means of production, cotton gin), shelter (houses, early and modern). This topic was the major center of interest for the entire term.

The study centered about such questions as these: How have fundamental changes in ways of life affected man's social existence? How has the social scene affected man's desire to continue the improvement of his material life?

Important emphases in the unit were: validity of facts, sources of data, importance of reliable information, the materials for social experience, organization of materials in a form understandable to the child, sincere respect for the work of others that is carefully done, cooperative enterprises, use of reading skills for gaining information, need for mastery of library techniques. Many of these social experiences contributed to a fuller understanding of democracy.

Other social studies units suitable for the upper elementary grades are:

The influence of cotton upon the development of our country

Domesticated animals, a factor in the standard of living

The cereal grains, an important factor in determining types of civilization

Studies of neighboring countries: Canada and Latin America

Studies of medieval times: chivalry and knighthood, the Crusades (both rich in dramatic possibilities)

Studies of ancient civilizations: Egypt, Greece and Rome, Aztecs and Mayas

Latin America

Mexico, the Central and South American countries, offer a wealth of material for study, material that is colorful, emotionally appealing, tingles with heroism, adventure, struggle, discovery, saturated with art and musical rhythms! From a political and social viewpoint every type of government and political organization is to be found in these countries.

In their study of Mexico, children in one school assembled materials, prepared displays and exhibits, read a small library of books, and made replicas of native products. They combined art, music, and creative writing with the study topics growing out of the unit, and extended their knowledge through museum trips.

Children studying the ancient Mayas and Aztecs made pottery and carvings like the originals. They also made a book picturing life as it was in those ancient times.

A group of children studying Latin America gave an exhibit at the end of their unit on Central and South America which included arts and crafts, maps they had made representing various phases of topography and life, natural products, and manufactured wares (5)

High School

Understanding the rise of American democracy has already been mentioned as an essential concept to be gained through the social studies. This understanding begins in the upper grades and broadens through unified studies in high school in which American history, literature, and the arts are combined.

The study of American life in the high school years gives students background for social problems. Stimulating topics are: democratic *versus* other forms of government; the Industrial Revolution; centralized government and states rights; the wage earner and labor unions; capitalism; the Constitution; social trends in America; standards of living as related to trade and commerce; our freedoms; public opinion; social change and the machine age; conservation of our natural resources; transportation; independence and interdependence in the world; understanding the rise of the individual in our culture; tolerance.

The junior high school student makes more advanced study than the elementary pupil of community and state problems, citizenship, and civilization throughout the world, but with special reference to his own country. Historical and contemporary studies are correlated. Geography, history, and science overlap in such studies as "Man's adaptation to his physical environment," or "Conservation." "Seeing the World with the Armed Forces" opened up a new world to one group of teen-aged students.

Being well-informed on current events is an aim of every well-educated adult. Current events deserve a place in upper grade and high school studies, not as a separate course but as one aspect of all the content areas. To keep abreast of the world, the student needs to be informed about timely events in the social studies, science, music, and other fields of learning.

Junior high school students at the Horace Mann-Lincoln School had a unit on "Tolerance" in which they studied the origins and results of prejudice and intolerance. Among other activities, they learned the songs of diverse nationalities, cooked and ate "foreign" foods, interviewed a leader in the community who had been successful in building tolerance in a polyglot neighborhood, and produced a play stressing racial equality.

The United Nations organization has given an impetus to studies of world unity all up and down the educational ladder, but particularly in the high school where students are setting up their own "World Courts" and "Assemblies" to gain a more realistic picture of this

great step toward permanent universal peace. Young people cannot afford to graduate from high school today without an understanding of world problems, the participation of their nation in world assemblies, and the part that they themselves will play as world citizens. This topic is more fully developed in Chapter 13.

For the high school, Far Eastern studies have more timeliness than ever before. A student once remarked to a teacher who was considering a study of Oriental cultures for a high school class: "I always thought China and Japan were too far away to be of any consequence to the United States." Now following World War II, since the Far East has come into close proximity with our country, we have awakened to the need for understanding the Asiatic peoples and our relationship to them in Pacific and World affairs. "Understanding China," "Our Neighbor, India," are timely themes for high school students. These countries, which contain a large share of the earth's population, are destined to play a larger part in world affairs than ever before.

QUESTIONS AND TOPICS FOR STUDY

- 1 List some of the important concepts elementary school children should gain from the social studies.
- 2 What themes derived from social studies would be appropriate for the primary grades? Intermediate and upper grades? Junior High School?
- 3 What advantages are there in unified teaching of the social studies?
- 4 How should the social studies be handled in the first three grades?
- 5 What do you consider to be the essential criteria for judging the value of a unit in the social studies?
- 6 Outline plans for developing a curriculum unit in the social studies. Indicate the grade levels for which the unit is appropriate.
- 7 Is it possible to integrate social studies and science? Suggest some topics in which this might be done.
- 8 Should history be taught in a systematic way apart from integrated units in the upper elementary grades?
- 9 Should geography be taught as a separate subject or in unit projects? What are the advantages either way?
- 10 How can a teacher interest a junior high school class in current events?
- 11 What is the best way to teach patriotism?
- 12 Write a summary of this chapter.
- 13 Write out five additional questions or topics for discussion based on this chapter.

REFERENCES

- 1 Ayer, Fred C. 'The Social Studies in the Changing Curriculum.' *Education*, 58 1938 397-405
- 2 Bining, Arthur C. *Teaching the Social Studies in Secondary Schools* New York McGraw Hill Book Co., Inc. 1941
- 3 Beard Charles. *The Nature of the Social Sciences in Relation to Objectives of Instruction* New York Charles Scribner's Sons, 1934
- 4 Bobbitt, Franklin. *The Curriculum of Modern Education* New York McGraw Hill Book Co., Inc., 1941
- 5 De Lima Agnes, Baxter, Tompsie and Francis, Thomas J. *South of the Rio Grande* New York Bureau of Publications, Teachers College, Columbia University, 1942
- 6 Dunn, Fannie W and Bathurst, Effie G. *Social Studies for Rural Schools A Tentative Three-year Plan for Combining Classes* New York Teachers College Columbia University, 1932 (Mimeographed)
- 7 Gavian, Ruth W. *Education for Economic Competence in Grades I to VI* New York Bureau of Publications, Teachers College, Columbia University, 1942
- 8 Horn, Ernest. *Methods of Instruction in the Social Studies* New York Charles Scribner's Sons, 1937
- 9 Johnson, Henry. *Teaching of History in Elementary and Secondary Schools With Applications to Allied Studies* New York The Macmillan Co., 1940
- 10 Lacey, Joy M. *Teaching the Social Studies in the Elementary School* Minneapolis Burgess Publishing Co. 1941
- 11 Marshall, Leon C and Goetz R. M. *Curriculum making in the Social Studies Report of the Commission on the Social Studies of the American Historical Association Part 13* New York Charles Scribner's Sons, 1936
- 12 Melvin, Arthur G. *Methods for New Schools* New York John Day Co., Inc., 1941
- 13 Mendenhall, James E and Harap, George eds. *Consumer Education Background, Present Status and Future Possibilities* N Y D Appleton Century Co., Inc., 1943
- 14 Preston, Ralph C. 'An Appraisal of Fusion of Social Studies in the Elementary School' *Elementary School Journal*, 1943, 44, 202-207
- 15 Reed Mary M and Wright, Lulu E. *Beginnings of the Social Sciences* New York Charles Scribner's Sons, 1932
- 16 Storm, Grace E. *Social Studies in the Primary Grades* Chicago Lyons and Carnahan 1931
- 17 Sweeney, Frances, Barry, Emily F, and Schoelkopf, Alice. *Western Youth Meets Eastern Culture* New York Bureau of Publications, Teachers College, Columbia University, 1932
- 18 Waddell Charles F, Seeds, Corinne A and White Natalie. *Major Units in the Social Studies for the Intermediate Grades* New York John Day Co Inc., 1932.
- 19 Wesley, Edgar B. 'The Nature and Functions of the Social Studies in the Elementary School' *The Social Studies in the Elementary School Twelfth Yearbook of the National Council for the Social Studies* Washington National Council for the Social Studies 1941 pp 47-56
- 20 Wesley, E. B and Adams, M A. *Teaching Social Studies in the Elementary School* Boston D C. Heath & Co 1946
- 21 Willcockson Mary and Horn Ernest. *Social Education for Young Children in the Kindergarten and Primary Grades* Curriculum Series No 4, January, 1946 The National Council for Social Studies Washington the Council, 1946.

- 22 Wrightstone J Wayne and Campbell Doak S. *Social Studies and the American Way of Life* Evanston Ill Row Peterson and Co, 1942.
- 23 Association for Childhood Education *Social Studies for Children* Washington the Association 1944
- 24 Bureau of Curriculum Development of the New York State Education Department *Social Studies for the New York State Children* Albany N Y 1945
- 25 *Course of Study for Virginia Elementary Schools, Grades I-VII* Richmond State Department of Public Instruction, 1943
- 26 *Curriculum Development in the Social Studies Kindergarten-9B* Progress Report. Curriculum Bulletin of the Board of Education, New York City 1942-1943 No. 5 New York Board of Education 1943
- 27 *A Guide to Teaching the Social Studies in the Elementary School* Minneapolis Minnesota Division of Elementary Education Minneapolis Public Schools 1943
- 28 National Council for the Social Studies *Twelfth Yearbook* Washington the Council 1941
- 29 New Jersey Department of Public Instruction. *A Handbook in Social Studies and Related Activities for the Primary Grades* Trenton the Department, 1932
- 30 Progressive Education Association. *The Social Studies in General Education* New York D Appleton Century Co. Inc., 1940
- 31 The Role of Consumer Education in our Elementary and Secondary Schools. *Balance Sheet* 1942 24 196-200
- 32 *The Social Studies Curriculum Fourteenth Yearbook of the Department of Superintendence* Washington Department of Superintendence of the National Education Association 1936
- 33 *Social Studies for Children* Bulletin of the Association for Childhood Education. Washington the Association 1943
- 34 *The Social Studies in the Elementary School Twelfth Yearbook National Council for Social Studies* Washington National Education Association 1941
- 35 *The Social Studies in General Education* Progressive Education Association. Commission on Secondary School Curriculum New York D Appleton Century Co. Inc. 1940
- 36 *Social Studies Source Units* Minneapolis Division of Elementary Education Minneapolis Public Schools, 1943
- 37 *The Utilization of Community Resources Ninth Yearbook National Council of the Social Studies* Cambridge Mass the Council 1938.
- 38 *What Democracy Means in the Elementary School* Educational and National Defense Series Pamphlet No. 6 Washington U S Office of Education 1942

For references on intercultural education and world unity see Chapters 12 and 13

Chapter 10

SCIENCE IN THE UNIFIED PROGRAM

The World of Science

We are living in a scientific era, the age of electricity and mechanical power. The important roles of science and technology in normal living daily become more impressive. As new sources of energy are discovered and harnessed, concepts and the terminology of science become indispensable to all. No matter what topic is discussed, science enters, permeating every phase of modern life. It is doubtful if we could survive today without the aid of science in our daily life. Science has also become an influence in world unity.

Science has vital significance for every child and youth as a part of his living and as a field of technical knowledge. The study of science provides new ways of thinking; it teaches children how to discover facts and how to use their knowledge in making new discoveries. For these reasons, children from an early age should learn to understand and to interpret scientific data. The Harvard Committee Report, *General Education in a Free Society*, proposed that the study of the physical world should be one of three basic areas in general education.

Children can begin at an early age to develop scientific attitudes and habits of thinking that will serve them all their lives. These include: the desire to ascertain the truth, the habit of suspending judgment until evidence is obtained, willingness to alter one's point of view in the light of new findings, questioning the authenticity of statements heard or read, distinguishing between fact and opinion, gaining habits of exact thinking.

Strictly speaking, science is a social study. In such topics as "Conservation," or "The worn out farm" all implications are social yet the basic data are scientific. A group of third graders who were studying "Indian life" as a social studies project wanted to construct some Indian shelters. To do this correctly they had to investigate climate in relation to shelter, which led them into science studies.

The aim in teaching science below the college level is not to make skilled scientists, but rather to increase the children's general knowl-

edge of the facts and principles of science so that each can have a better understanding of the world in which he lives, and be able to live more competently

Children's Early Interest in Science

From the time they first begin to ask questions, children show curiosity about physical causality. One little girl of five asked 'Why doesn't my spoon leave a hole in my cocoa when I take it out?' Others have asked such questions as "What does 'forever' mean?" "Who made God?" "How wide is the sky?" "You never can get to the end of the sky, can you?" This natural curiosity of the child is the starting point for school work in science.

Children of all ages like to experiment with scientific phenomena in their leisure time and are continually doing so in their improvised laboratories at home. They enjoy bringing in things from the out-of-doors and their curiosity about living things often leads to serious study of natural science.

Teaching Science

To many persons "science" connotes an abstruse school subject that few are qualified to master, a highly specialized field for the university graduate. Actually science in its applied forms can be a fascinating subject even to the youngest school child.

Unfortunately, in the past, instruction in science has been confined largely to the high school and treated there as textbook material to be memorized rather than phenomena to be experienced at first hand. Biology courses have dealt largely with stuffed specimens instead of developing an understanding of living things and their interrelations. Remoteness from reality has made the subject uninteresting and difficult.

In the elementary school, science has tended to be largely nature study learned from textbooks. Even in rural areas with nature all about them, children have studied science in the abstract. This is discouraging to children who in their out-of-school lives enjoy experimenting with science materials and accumulate a store of scientific information through actual experience.

Louis Agassiz's advice to would be naturalists was 'study nature, not books.' It is futile for the school to attempt to give satisfactory science instruction through textbooks alone. Children must be given the opportunity to manipulate the materials of science to investigate where their interests lead, and to experiment with machines, animals,

and other real objects in order to acquire scientific concepts and habits of thinking

It was Dr Abraham Flexner's idea that science should be a central and dominating feature of every school. In his opinion, learning about science in the lower grades should be incidental, the children becoming acquainted with the world about them, gaining knowledge about objects animate and inanimate. The next stage should introduce experimentation in the physical, chemical, and biological sciences. In the higher grades, work in science becomes more truly "scientific."

The questioning of unfounded beliefs is considered an objective in the teaching of science. One by-product proves to be the decline of superstitious belief and the reduction of gullibility.

Science in the Elementary School

In the modern elementary school, science is not another formal school subject taught through words, but a series of experiences that pervade school life from kindergarten onward. Teaching science does not consist of stuffing children with information, but of proposing problems, finding solutions, setting up experiments with natural phenomena to help solve problems, citing authorities for scientific facts and making field trips to gain firsthand knowledge.

Handling science materials is what science means in the lower grades, not acquiring an understanding of the scientific method. In the primary grades, science must be largely dramatic play with construction materials. Young children come to sense through their creative play activities the physical properties of things, fundamental concepts about size and weight, number relationships, the basic concepts about machines, time and space.

The teacher should go into science sources whenever a problem arises concerning the effects of science upon our way of living. The best teacher of science is not necessarily the specialist in science, but the person who properly places the problem, the teacher with a background in science.

Popular science presents valuable instructional content for the slow learner because these children are invariably interested in science, they are eager to see and to do experiments, and benefit most from concrete learning. This area more than any other gives opportunity to learn by doing.

In order to develop the scientific point of view, the recommendation of the Virginia course of study (24) is that there should be many experiences in problem solving at school where the pupil is encouraged to

Seek explanations and causes
Consult reliable authorities
Question authority constructively
Base judgments on facts
Attack an undertaking with confidence and dispatch
Welcome suggestions and information
Respect the point of view of others
Be willing to acknowledge that one doesn't know something
Be free of superstition

In the elementary school, science offers large possibilities for unit studies. Among the many advantages of curriculum units centering around science as a core are such activities appeal to the majority of children regardless of age and degree of maturity, there are maximum opportunities for concrete experiences, for using materials that lie at hand, experiences both in and out of school can be continuous, work in science stimulates curiosity, arouses the imagination, content from other areas is employed in science projects, science units and projects utilize all the skill a student possesses in the fine and industrial arts as well as the traditional three R's. The science laboratory becomes an integral part of the school. Films, recordings, projected pictures, and museum exhibits offer many new possibilities in the teaching of science.

Activities Through the Grades

In the kindergarten and first grade children can learn about trees, birds, flowers, the sky, sun, moon, the weather, rain and snow. They are able to begin learning about the operation of simple mechanical things. The study of science should follow the changing seasons through the year. There can be short excursions to investigate nature at first hand.

In one first grade where there was an aquarium, the children wanted to know why plants were needed in the tanks. The teacher explained that oxygen given off by the plants was needed for animal life and demonstrated the presence of oxygen in the air.

In another school, second grade children had a science discovery table on which specimens were placed and interesting scientific phenomena could be observed.

Another second grade group studied wild and domestic animals, learning how they are protected by their coloring and structure. They discovered how plants, animals, and people get ready for win-

ter The children visited a museum, a zoo, saw movies, toured a farm Still another group studied "Signs of spring" They had living creatures to observe in their classroom snakes, a toad, bugs, snails, cocoons

One second grade class developed the unit "Making a farm" The children talked over together what they would need to do, what work each would undertake They took trips to a farm, read books about farms and farm animals, and learned about work on the farm

Children in a third grade in New York studied the Hudson River When the question of glaciers arose, the children wanted to know what a glacier looked like The science consultant came in with ice from the refrigerator and demonstrated how glaciers were formed and their effect on rock formations, as well as their use in supplying water for distant places

Another third grade made an aquarium and a star finder, they classified rocks, birds, and insects

Boys and girls in the middle grades are interested in modern inventions and discoveries, although working with electricity can be begun even in the primary grades The beginners play with magnets, first and second graders can wire a door bell for the playhouse, in third grade a telephone system may be set up and operated between the second and third grade classrooms

Third graders in one city school carried on a unit study of ancient man They learned about children of the cave men, the tree dwellers and early herdsmen Gradually their study expanded as they began to consider how the earth was formed, how coal was made, the formation of rocks and mountains They gained some rudimentary geographic concepts of the earth, and learned to use maps Their class obtained collections of fossils, minerals, and petrified wood They drew pictures of dinosaurs they had seen represented at the museum This project laid the foundation for more extensive studies in natural science, history, and geography the following year

The Weather.—The weather and elementary meteorology are topics that all children enjoy A weather unit can accomplish many things supply an understanding of the scientific principles that control the weather, establish the concept of the weather as predictable, not solely a matter of luck or chance, overcome superstitious beliefs about the weather, teach the relation between weather conditions and activities of daily life A weather unit may include reading, studying, and experimenting on the composition of the air, studying the effects of climate and weather on man, animals, and farm products,

thus indicating the need of weather predictions, demonstrating the tools the weather man uses in making predictions some of which in simple form the children themselves can make, drawing of weather maps, and, finally, illustrating the methods of compiling weather data in tabular and graphic form

Fourth grade pupils in one school set up a weather bureau in their classroom, kept weekly and monthly weather records on a prepared chart, and studied the work of the United States Weather Bureau. They collected weather reports and weather bureau maps over a period of a month to test the accuracy of predictions in their locality.

Among the things they learned were

- 1 How to use a thermometer
- 2 How to use a barometer
- 3 How to interpret a weather vane made by a pupil
- 4 How to use a chart which gives simple ways to determine wind speeds
- 5 To measure snow and rain accurately in a flat pan with ruler
- 6 To determine the degree of blueness of paper dipped in cobalt chloride, the blueness depending on the amount of moisture in the air
7. To recognize four main types of clouds, to describe the sky, day and night
- 8 To keep an accurate daily record of weather conditions on the master chart

Rocks and Minerals—An account of the explorations made by a fourth grade in earth science has been given by Edna Bridge (4). The first unit on "Rocks and Minerals" was the direct outgrowth of the children's interests. As the unit developed many different topics were studied

Theories of the earth's origin

Planets stars, moon

Cause of day and night

Change of seasons

Gravity

Magnetism

Volcanic action

Classification of rocks according to origin

Constructive and destructive land forms

Kinds of soil

Physiographical concepts island, river, mountain, valley

Use of maps

Identification of rock specimens

Various content areas and numerous skills entered into the study—science and geography, history and fine arts, industrial arts, cooking, language, writing and spelling, reading and arithmetic.

Many individual and small group interests were developed—studying fossils, petrified woods, glass, brick making, experimenting with cement, asbestos, lead pencils, and building materials, making a model of a coal mine, chart making to illustrate how rocks are worn away.

Another year a somewhat different unit which the children referred to as the "Beginnings of Things" was developed. The scope of this unit included

- Magnetism and gravity
- Theories of the earth's origin
- Heavenly bodies
 - The solar system
 - The stars and constellations
- Atmosphere
- Water
- Rocks and minerals
- The development of life on earth

Children's Approaches Vary.—In developing science units, groups of children, as well as individuals, vary in their attack on problems. Some groups have keen intellectual interests, enjoy discussion, tend to look up materials in reference sources, bring in to class contributions drawn from their experiences outside. Other groups show more interest in manipulative activities, in making things in the shop, or working in arts and crafts. Such varied interests should always be provided for in developing science units.

Children in the middle grades gain background for the subject of "Conservation" through studying the value of trees, plants, and birds, and learning about the balance of nature. Here is an illustration of how school children helped in one conservation program.

For the past eleven years Waycross, Georgia, has set aside the third week in March as Protect the Toad Week, during which the many virtues of the common garden toad are advertised. It is said that each toad in the garden is worth \$20.00 a year to the gardener, yet the wanton destruction of toads by both children and adults is commonplace.

The school children in all grades made posters, wrote stories and essays, compiled scrap books, collected pictures, photographs, music, talking machine records, pottery, magazine and newspaper articles, books, scientific articles, superstitions and legends, facts and falsehoods about all kinds of toads. Their efforts to save mankind's humble

friend from the danger of becoming extinct caused Waycross to be awarded a silver cup for the most outstanding humane education work done by any city or town in Georgia.¹

Older boys and girls living in denuded territories frequently work on reforestation and restoration projects. Coordinated school work offers training that sometimes leads to vocations in this field.

The study of physical geography becomes fascinating with such instructional aids as the Harvard University talking films distributed by the Encyclopaedia Britannica Company, Chicago and New York.

Topics for elementary science developed by Charles K. Arey (1) include Experiments with plants, The atmosphere, Story of the earth, Seasonal change, Magnetism and electricity, Heat, light, sound.

Upper graders learn about steam propulsion and the operation of a dynamo. They experiment in making soap, plastics, paper.

Marine Life.—A sixth grade in a school on Long Island, New York, made a fascinating study of marine life over a period of several months that began with the children's interest in pictures of colorful underseas creatures. In developing this project the school librarian lent the class books, magazines, and pamphlets on the subject; the art teacher helped the entire class with their realistic and fantastic pictures of marine life in the art studio; the science expert assisted in identifying specimens and in constructing aquaria. During a period of a month or so many reports were given by pupils on various phases of this topic that they had chosen to study individually or in small groups. They built peep shows reproducing underseas scenic effects and finally wrote and produced a play on the subject for which they designed and made appropriate costumes as well as a huge backdrop with marine motifs. Along with the play there was a display of the many beautiful pictures the children had made depicting various phases of underseas life. Younger children, as well as the older ones, and the parents all had an opportunity to see and hear interesting reports of life in the deep. The learning that resulted from this unit branched out into many different areas of content and skill, although it was considered primarily a science project.

Aeronautics.—As the result of a project under way since 1942 with the Civil Aeronautical Administration as sponsor, children from first grade upward are to be made aviation conscious (9) before graduation. The objective is to give them an understanding of the economic and social aspects of commercial aviation and for them to

¹ From an account in the *New York Sun*, 1942.

have studied enough of the sciences involved to enable them to understand plane construction and operation. This is the type of study that lends itself well to project work and to integrated experiences, engages all the knowledges and skills at the child's command, stimulates the desire for experiences that reach into all traditional school fields, carries teachers and pupils beyond the school room, and affords scope for creative work.

Science in the high school offers fruitful learning opportunities, especially in conjunction with mathematics when this subject is considered a basis for understanding modern technology.

Science can be used as the basis for assembly programs given by both younger and older children. These assemblies demonstrate how genuinely skilful elementary school children can become in working with science materials and what an effective educational feature a science assembly can be as a culmination for science projects.

QUESTIONS AND TOPICS FOR STUDY

- 1 What concepts should children gain from their science experiences at school?
- 2 Outline a program for teaching science through the grades.
- 3 What advantages are there in teaching science through activity units?
- 4 List several science themes or topics suitable for unit studies, indicating the grade levels where they should be taught.
- 5 How should science be taught in the first three grades?
- 6 Outline plans for developing a unit in science.
- 7 How can the teaching of science and health be related?
- 8 Describe several science units for a particular grade level. Indicate the grade level in which the units are appropriate.
- 9 How should science be taught in the junior high school?
- 10 What source materials and equipment are needed for the modern teaching of science in the elementary grades? The high school? Indicate some of the ways in which audio visual aids could be used in teaching science.
- 11 Write a summary of this chapter.
- 12 Write out five additional questions and topics for discussion based on this chapter.

REFERENCES

- 1 Arey Charles K. *Science Experiences for Elementary Schools*. New York: Bureau of Publications, Teachers College, Columbia University, 1942.
- 2 Beauchamp Wilbur L. and West Joe Y. *Science for Children*. New York: Scott Foresman & Co., 1936. (Teachers Guidebook for Science, Curriculum foundation series.)

- 3 Bergen, Catharine 'Meeting the Science Needs of Children in the Intermediate Grades' *Educational Method* 1938, 17 188-191
- 4 Bridge Edna. *Millions of Years in a Winter* New York Bureau of Publications Teachers College Columbia University 1935
- 5 Craig Gerald S. *Science in Childhood Education* New York Bureau of Publications Teachers College Columbia University 1944
- 6 Craig Gerald S. *Science for the Elementary Teacher* Boston Ginn & Co 1940
- 7 Croxton, Walter C. *Science in the Elementary School Including an Activity Program* New York McGraw Hill Book Co Inc 1937
- 8 Dolman Helen. *The Teacher's Manual and Science Handbook* The Scientific Living Series Syracuse N Y The L W Singer Co 1939 1941
- 9 Engelhardt Nicholas L. Jr. *Education for the Air Age* New York The Macmillan Co 1942
- 10 Fitzpatrick Frederick L. *Science Interests* New York Bureau of Publications Teachers College Columbia University 1936
- 11 Garrison Charlotte G. *Science Experiences for Little Children* New York Charles Scribner's Sons 1939
- 12 Lammell Rose. "Science as a Part of Living in the Elementary School" *Educational Method* 1937 16 417-421
- 13 Lynde Carleton J. *Science Experiences with Home Equipment* Scranton Pa. International Textbook Co 1937
- 14 Melvin Arthur G. *Methods for New Schools* New York John Day Co Inc 1941
- 15 Morris Elizabeth. "Construction and Teaching of a Unit on Sound in the Third Grade" *Science Education* 1942 26 200-203
- 16 Noll Victor H. *The Teaching of Science in Elementary and Secondary Schools* New York Longmans Green & Co Inc. 1939
- 17 Oakes Mervin E. *Children's Explanations of Natural Phenomena* (Manuscript thesis) New York Teachers College Columbia University 1940
- 18 Parker Bertha M. *An Introductory Course in Science in the Intermediate Grades* Chicago University of Chicago Press 1931
- 19 Pilsbury George E. *Science Excursions into the Community* New York Bulletin of Teachers College Columbia University 1943
- 20 Zinn H S. *This Is Science* Washington Association for Childhood Education 1945
- 21 Progressive Education Association. *Science in General Education* New York D Appleton Century Co. Inc 1938.
- 22 Aviation, A Unit with Bibliography" *Grade Teacher* 1942 60 52.
- 23 *Science in the Elementary School* Sacramento Calif California State Department of Education 1945
- 24 *Course of Study for Virginia Elementary Schools Grades I VII* Richmond State Department of Public Instruction 1943
- 25 National Society for the Study of Education. *Science Education in American Schools Forty sixth Yearbook, Part I* Chicago University of Chicago 1947
26. *A Program for Teaching Science Thirty first Yearbook of the National Society for the Study of Education Pt. I* Prepared by the Committee on the Teaching of Science Bloomington Ill Public School Publishing Co 1932.
- 27 Science Committee. *Science and the Young Child* Association for Childhood Education Bulletin. Washington the Association 1936
28. *Science Guide for Elementary Schools* A monthly publication of the California Department of Education Sacramento Calif
- 29 *Science Instruction in Elementary and High School Grades* Chicago University of Chicago Publications of the Laboratory Schools No 7 1939

Chapter 11

LITERATURE AND THE ARTS

I

Classical literature holds an indisputable place in every child's education: not alone the classics of English literature, but the world's great works from any source and in all forms—prose, poetry, and drama—with all their great, enduring, timeless themes.

The aim in using literature in unified teaching is to give every child the fullest, most vivid experience that is possible through his hearing or reading the world's great writings; the aim is not primarily to impart knowledge or furnish information to be memorized. The experiences that the children attain through literature are as much emotional as intellectual; the values to be derived are aesthetic, social, cultural, and recreational.

The study of literature serves many objectives: as an aid to understanding the essential worth of human beings, as an interpretation of the democratic process, as a revelation of the richness of a nation's culture, and as recreation and relaxation (16).

Literature in the School Program

World literature covers so wide a field that only an expert can appreciate or portray its full implications for the curriculum. Several guiding principles will be listed for teachers who wish to make full use of literature in the school program. These principles apply equally in elementary or secondary school.

1. Children, throughout their school careers, should become acquainted with the classics in literature, either through reading the books themselves or having great literature read to them. But children should not be expected to derive literary appreciation solely through their own reading. Instead, literary appreciation can be gained through hearing the teacher read aloud, and through listening to radio programs and phonograph records.
2. Poetry and drama should be given the same recognition as prose selections.

- 3 Children should become acquainted with the world's heritage of fairy tales and legends and with mythology from such sources as the Greek Norse Chinese Hebrew and American Indian
- 4 Literature should not be taught as a separate subject with its allotted 15 to 30 minutes a day or hour a week but should be employed so as to enrich the entire life of the school as well as the studies being carried on in the unified program In the study of Transportation The Early Settlers Indians Our Growth as a Nation each theme has its appropriate literature
- 5 All projects or units chosen for the year's study should be considered from the standpoint of what literature can contribute to them The units offering the richest literature are the ones to be preferred
- 6 There should be opportunity each week for children to browse among books that represent great literature to read for fun so that the eager interest in great literature once aroused will be sustained There should be classroom discussion of these books and their themes so conducted as to stimulate a love of books to encourage more reading in worthwhile materials and to give each child a chance to participate
- 7 One of the objectives in teaching literature is to help each pupil form discriminating tastes However reading tastes are an individual matter and each child has a right to his own personal tastes in making choices No one can judge as well as the reader himself which literary forms or authors please him most One individual's preferences may not be shared by another

There are so many fascinating new books each year that a teacher may be inclined to consider the classics old stuff These may seem old to the grownups but there are always children to whom the literary classics are new

Literature for Social Understanding

Children can begin early to gain the social implications of literature to use literature to understand periods people and their ideas and as a means of studying the customs and habits of other times The growth of American ideals and institutions is reflected in the literary products of its great writers

American literature has more to offer young American school children than English literature even though it offers somewhat less in both quantity and quality because it contributes to the understanding of American culture Huckleberry Finn and Tom Sawyer Cooper's tales retain their supremacy as literary classics that educate in a broad cultural sense American literature is nearer to the Amer-

ican child's own experiences or the tales he has heard. It can be more genuinely lived by the children.

American literature is not to be taught as a subject apart from others, but as background for understanding any period in American life the pupils may be studying. The pupils obtain cultural background as they read the literature that accompanies the historical developments of any period. All literature should be taught with consideration of the social conditions of the time in which it was written.

Literary Revival in the Schools

Until recent years, the study of literature at school has been largely confined to the study of literary fragments in readers for practice in oral reading, or for language drill in English courses. Under these conditions, literature could not fulfill its high purpose of enriching understanding or giving children emotional satisfaction. Aside from hearing "Hiawatha" read to them in second or third grade, and dramatizing selections from the poem, school children for half a century had little access to the treasure house of literature except as they themselves could browse in libraries outside of school or at home.

The study of literature is rapidly achieving a new status as background material to accompany unified studies in the social sciences, the natural sciences, and the fine and applied arts. Literature can now be invested with new life and vitality in view of rapidly expanding library facilities, the supply of less expensive editions of the classics, the impetus given to the study of the classics by the movies, the radio, recordings, and the wider publication of excellent children's books.

Literature in the Unified Program

Experiments at all grade levels with the unified program have demonstrated how effectually the study of literature can be tied in with curriculum units. Instead of children being limited to fragments in a single textbook, or an isolated poem here and there, a wide range of literary selections is offered and children may have wide latitude in choosing what to read.

A third grade making a study of primitive man had access to the school library which furnished a dozen good story books of primary level on this theme. One of these, *Turi of the Magic Fingers*, they dramatized as the culmination of the unit.

A bright fourth grade, as part of their industrial unit, enjoyed making a puppet show based on *The Adventures of Misha*, a story of modern life in Russia.

Sixth grade boys and girls enjoyed reading selected works that enriched their study of life in South America. The literature that accompanied their study is listed in the published description of the unit, *South of the Rio Grande* (4)

Junior high school students studying the Orient enjoyed a whole library of poetry and prose. The books and literary selections they used in the study are listed in *Western Youth Meets Eastern Culture* (17)

Literature and the fine arts, music, painting, sculpture, dancing and the drama go hand in hand to deepen the aesthetic experience of boys and girls at school. The possibilities for enrichment from the linkage of literature with the fine arts in studies of Latin America, Greek life, Egypt, the Orient, Life in the South before the Civil War, have been demonstrated in curriculum units developed in experimental school programs.

The study of the classics in poetry and prose not only widens the child's horizon but stimulates him to do some literary work on his own account. The children who carried on the units just mentioned rewrote some of the stories in dramatic form and created their own prose and poetry around the themes suggested by their literary studies.

The enrichment of units through the wider use of literature means that the teacher must be acquainted with literary sources, must continually seek new materials, and must develop reading lists to accompany the units. The Los Angeles City Library assists teachers in this enterprise by furnishing to teachers throughout the city schools comprehensive reading lists of story books and informational material correlated with the study units.

It is a good idea to draw up lists of stories in available school readers or other texts that relate to unit topics. A committee of teachers in one community undertook to do this for the entire school system.

The Fanciful versus the Realistic

It is sometimes argued that the imaginary, unrealistic, or fantastic should have no place in literature for modern young children who live in today's realistic world. Ordinary observation proves how much children enjoy the comic, the amusing, the fantastic and the imaginary all the way from kindergarten through adolescence. *Alice in Wonderland* and *Br'er Rabbit* have enduring appeal. When allowed to express themselves, children show imagination and fantasy in their writing and drawing, and this interest should be reflected in the literature provided for them.

Continuously through the school experience of every child there should be a place for the magical, the fantastic and the humorous in literature as well as the commonly encountered realistic informational reading. Fiction, mystery, fun, and nonsense serve as relaxation from more serious factual learning. Providing outlets for the imagination, they also help to compensate for the restraints imposed upon the children by adults.

All studies of children's reasoning show that the world of reality does not get straightened out for them on entering the first grade, there is a long period of evolution in their mental processes until the time is reached when the child can think with objective realism. The child should not be denied the right to enjoy the glamorous world of fantasy to be experienced in literature.

How long children should have fanciful or imaginative material depends upon the particular child's temperament and his immediate purposes in reading. The imaginative in literature appeals as much to upper graders as to younger boys and girls, provided really good material is available. Individual children vary widely in the extent to which the fantastic appeals.

Story Hour

Story telling is an effective way of presenting literature to younger children, for it is sure to arouse interest in literature when children are too young to read the classics for themselves, it is also a means of interesting older children who are unacquainted with great books.

Children's literary experiences are widened through hearing stories well told. The older boys and girls enjoy hero tales of Roland and Siegfried, King Arthur and Robin Hood, as well as the experiences of *Br'er Rabbit* and the adventures of *Dr. Doolittle*. Children enjoy hearing stories that are simply told without too much detail, but which contain plenty of action. Mysteries, funny stories, and tales of adventure and imaginary worlds are most in demand. Children are not usually bored by hearing an interesting story retold.

The story hour can be used either for the reading or telling of stories. At special seasons of the year there can be a story hour assembly for the entire school or for several classes combined. One method of interesting children in literature they would not otherwise select is for the teacher to read part of a story that the children themselves are well able to read, then to break off at an exciting point and ask whether anyone cares to take the book to read for himself.

Passing around among the children the book from which the stories are read so that they can examine the pictures and comment

on the story also gives them more incentive to read for themselves. Vocabulary enrichment takes place as the teacher explains the new words. An informal arrangement of chairs in a circle, the children sitting on the floor, the teacher on a divan with one or two children alongside makes the whole story telling experience still more enjoyable. The result is more enthusiasm for books and curiosity about their contents.

Poetry Hour

Too often poetry has been treated as punishment so many lines to learn under duress. Instead reading poetry, hearing it read and learning poetry should be glowing experiences.

Why skip the poetry because it is sometimes too difficult for the younger children to read for themselves? There is no form of human expression that can give children more satisfaction from the first day at school until graduation time than poetry.

How shall an interest in poetry be cultivated? One of the surest ways is to begin very early. Then to continue the interest once stimulated poetry should be shared casually with the children by adults whether parents or teachers.

Children should read poetry, hear it read, enjoy it with the group, they should memorize some poetry, and write down their own poetic thoughts.

One teacher, in the poetry hour she conducts every week, tells the children to bring in their favorite poems and asks them to take turns reading or reciting them. The teacher then proceeds to read other selections the children have requested. Then she teaches a new poem. She has the children list their chosen poems under headings funny, sad, action, stormy, and the like.

Similarly a literary hour or club might be held which would afford an opportunity for reading, selecting and enjoying interesting and worthwhile material.

An interesting program in an elementary school occurred during an assembly at which children read their own poems, read or recited prose gems from literature and listened to phonograph records of famous poems. A guitar accompaniment added interest to several numbers on the program. Another way for children to enjoy poetry is through choral speaking or group recitation. This was the method heartily enjoyed in a remedial reading class composed of slow learners. Three children who needed improvement in speech constituted the 'chorus' and entertained the rest of the class with their renditions from Robert Louis Stevenson.

II

The Fine and Applied Arts

Life is enriched through awareness and expression of aesthetic values. Art is another language, a means of emotional communication, according to Tolstoy, it is a form of expression and experience that adds another dimension to life and helps establish better balance in the individual. Art and aesthetics contribute to the life of feeling and emotion. Art is for everyone, not solely the gifted few who appear to have exceptional talent. Art work is not to be considered a fad or frill but a basic medium of expression for every child.

Expressive and creative experiences can be enjoyed in the arts through music, rhythm, literature, poetry, writing, applied and industrial arts, drama, and dancing. Art work in the school tends to offset emphasis on the strictly academic and contributes to the relaxation of tensions that a program too heavily weighted on the academic side tends to produce. Education in art helps every child to understand and enjoy the beauty in his own environment and to interpret this beauty in the way that gives him greatest satisfaction.

Historically, the arts have flourished best when they have been identified with folk ways and community living, when art is identified with everyday life. In our modern civilization, the fine and applied arts have tended to become dissociated, but the distinction is now breaking down as the interrelation between art and life is more fully appreciated. Today, children's experiences in arts and crafts at school may lead to vocational interests as well as leisure time hobbies.

An elementary school child summed up her feelings about art experiences in the following lines:

The Wonder Road of Art

The Wonder Road of Art¹
Who knows where it may lead?
Over the dusty hills and plains
Through the wet marshes and jungles
Deep beneath the seas
Above the snowy clouds,
But wherever it leads I will follow it
Until the end fades away in the sunset.

The purpose of art education is to help every child share in the beauty of his environment, both by learning to appreciate aesthetic qualities in his surroundings and by contributing art quality to his surroundings through his own creative effort.

Art has its appreciation as well as its technical side. The less talented may enjoy art products even though they cannot produce creatively.

Arts in the Modern School

Since the arts and related aesthetic experiences constitute the expressive side of life in all its phases, art expression is interwoven with everyday life in the school as well as the life outside. This means that art with a capital A is not a segregated subject or a formal school skill, neither is it to be considered a special or extra for a few talented students. A formal curriculum in the arts isolated from the rest of school life is highly undesirable. Experiences in the arts should permeate the entire life of the school.

The purpose of art instruction is to awaken aesthetic interests and to give pleasure, to arouse an awareness of aesthetic values, as well as to develop skill in the arts.

School art instruction is moving away from emphasis on fixed standards of achievement, technical accuracy in the reproduction of art models, and theory of art toward individual creative expression, appreciation, the widening use of art in everyday life, and art as an adjunct to the unified curriculum. There is scarcely a curriculum unit that does not have its art phases, whether in the field of music, the graphic arts, literature, drama, or the applied arts.

When the arts pervade school life, there is a tendency to use the art resources of the community to achieve cooperation between school and home in art projects, and to free more time in the daily schedule for art work.

The fact that art work is integrated with life in the school does not imply that there need not be periods or a place set aside for work in the arts. On the contrary, since art work demands special equipment and since it benefits from supervision under an expert consultant in this field, time and space for art in a large elementary or high school must be carefully scheduled.

A problem for the teacher is to select from the whole broad field art experiences that will make the greatest contribution to child life both in and out of school.

Fostering Creative Ability

Children of all ages are gifted with creative power, but unless the school provides an environment in which children are free to express themselves in interesting and original form, these powers will

not develop. The teacher's task in art instruction is to draw out the creative power each child possesses. This objective is achieved through showing sympathy with the child's efforts, by giving him confidence that he can achieve, by refraining from criticism based on arbitrary judgments of correctness in art. Too much formal instruction tends to repress originality and initiative, to make the child feel self-conscious or inferior. In one case a teacher felt unable to let the children design the stage settings for themselves for fear of "poor results."

Creative work in the arts is the natural outpouring of urges and feelings, an expression of the child himself. In developing creative ability, the good teacher keeps in the background as much as possible. The teacher should watch the child with exceptional talent so that he is not lost in the group, but is enabled to develop his creative talent to the utmost.

Music

Music touches the life of everyone, contributing to a complete, well-balanced life. Every child, including the youngest, enjoys experiences with music: interpreting and acting to music, performance on the simplest instruments, or listening to favorite selections.

Musical expression is more universal than any other art form. It is more closely allied to the body's physical need for motor and emotional expression, and for vocal communication. Musical expression is, in fact, a direct outgrowth of the young child's babbling, laughing, and crying. Peasants the world around have invariably been musical; music is an intimate part of their everyday lives. Wholly untaught and without written musical notations, they live and express themselves musically in a natural way. Since children show the same traits and tendencies, rhythm and musical expression may be considered one phase of normal development.

The modern child lives in a world that is musically far richer than any preceding era. The radio and musical phonograph records have brought the world's best musical creations within everyone's reach. These factors make richer musical experiences possible for everyone.

Although the fundamental musical traits and capacities are undoubtedly inherited, musical achievement is far less subject to native endowment, far more influenced by early and wide experience under expert guidance, than most teachers and parents suppose. Children presumed to be tone deaf prove with training not to be so, and surprising musical results are achieved in cases where they would least

be expected. Proper guidance by parents and teachers will lead most children to enjoy and participate in music.

School Music.—The chief aim in music teaching is not mechanical proficiency but self-expression—finding joy in making music. School music experiences should include listening, rhythms, singing, and instrumental work, individually and in groups.

The new trends in school music may be summarized as follows:

The early years should provide for pure enjoyment of music, rote singing, rhythms, dancing, dramatic expression with musical accompaniments, listening to classical music and poetry. Natural spontaneity in musical expression should not be impeded by formal lessons. Rousseau offered the sage advice for the early years: "Teach music so long as it is nothing but play."

Simple musical notation, such as Satis Coleman advocates, is gradually introduced (39). With this 1, 2, 3, notation the children can learn both to read music and to record their own musical ideas.

There is a gradual increase in technical facility, but never to such an extent as to create distaste, rejection, embarrassment or a feeling of failure.

All the forms—appreciation, participation, creative expression—are simultaneously enjoyed. There should be singing every day. There is a place in the program for sheer enjoyment of music apart from drill or practice to perfect skill in playing instruments or in singing.

Musical activities include in addition to singing, dancing, rhythms, seeing musical films, hearing recordings, exploring instruments. Opportunity is given for children to follow their individual interests in creative music and musical enjoyment.

Most public school music, in the elementary grades at least, will be built upon singing since vocal expression is universal, whereas instruments may be few or entirely lacking. Every child in learning to sing should acquire a repertory of good songs (50), and these singing experiences should be happy ones, not mere technical drills for sight reading that too often completely kill a budding interest in music. The natural transmission of folk music never requires drill in a complicated system of note reading such as our formalized music pedagogy demands.

In school music, as Mrs. Coleman points out, the goal, usually unattained, has been note reading in sight singing. This skill has been taught long before children have been ready for it. In some schools, note reading in standard musical notation has been taught

even from the first grade. No wonder children have found school music a dreary task instead of the natural, joyful experience it should be.

There has been deplorable formalism in too much music teaching. Instead, music should be spontaneous, pleasurable, emotionally satisfying. Children should be able to enjoy music at school as a natural part of their lives, for nearly all children have strong natural impulses to make music when they come to school.

For five years, the Horace Mann-Lincoln School of Teachers College, Columbia University, has experimented with professional music and dance programs. One afternoon a month during the school year a recognized artist is featured at a concert or performance at the school. Programs are informal. The children show their enjoyment of the music and dances as they sing and clap their accompaniments.

Music Unified with Other School Experiences.—Music forms a natural accompaniment to unified studies throughout the grades and high school. It would be unfortunate, however, if teachers forced the integration of music in studies centering about problems in social studies or science, and there is certainly no justification for swinging to the other extreme, as some schools have done, in an effort to integrate all music teaching with units or projects. Music should be experienced and enjoyed frequently for its own sake. However, since music enriches in the aesthetic realm, which is so often slighted, it is a desirable practice to seize upon every occasion that presents itself for tying music in with unit studies.

In one school musical experiences were integrated with the following curriculum units:

First and Second Grades Community helpers, farm life

Third Grade Indians

Fourth Grade Children of foreign lands, Switzerland

Fifth Grade Pioneer life

Sixth and Seventh Grades Latin America (folk music), modern inventions

In these programs, every child is given a chance to experiment with musical ideas, though a few always make more acceptable contributions than others.

Experimenting with music as a part of school projects does not mean that work in music is spasmodic or unplanned. On the contrary, long hours may need to be spent in creative effort and on the practice needed to perfect performance.

One boy who began the study of Indian music and dances in the third grade in connection with a unit on Indian life became so interested in the study that it continued to be his major interest lasting well into high school. In fact, he became the recognized expert on this subject in his community at an early age.

In some schools children have made their own simple instruments, have composed tunes and have given informal concerts. In one school the children made primitive musical instruments, and played music they had composed, sometimes using the Greek scale or the Chinese scale (39). In the same school, a symphony score was composed and later performed by the pupil orchestra, with each child playing an instrument he had made.

Guiding pupils to music outside the school—radio concerts, recitals, records—is a responsibility that all teachers seeking to direct pupils' musical interests and improve their tastes should assume. Every school needs to build a library of recorded music and poetry.

The Dance

Through dancing, children give expression to their feelings and creative ideas. The dance as an art medium allied to dramatics and music is enjoyed for its own sake and also for the contribution dancing makes to class enterprises. Who could imagine an "Indian unit" or a "Polish festival" without its dance accompaniment? Even a more prosaic theme such as "modern inventions" may be enhanced with appropriate dance rhythms. Folk dances make a contribution to a study of pioneer life in America. Folk dancing enhanced a junior high school Christmas pageant, depicting Christmas at the court of Queen Elizabeth. Square dancing fits in with American historical themes.

The Graphic Arts: Drawing, Painting, Modeling

Every child should experiment with drawing, painting, and modeling whether or not parents or teachers consider that he has talent. With young children, drawing is a form of language, painting and modeling are additional modes of expression. Not every child, when he draws or paints, is responding as an artist. He may only be reminding himself of a happy event, reliving an emotional experience, or seeking an outlet in imagination.

Too often, teaching in the graphic arts has had a repressive effect on children's expression in drawing and painting. Children have been expected to copy models slavishly, or to begin with drill exer-

cises in strokes The child's spontaneous drawing has been criticized as being "infantile," not up to adult standards, unfinished or "too rough"

Teachers and parents need to see more of children's spontaneous art work from the earliest years to appreciate the close relationship between the child's developing mentality and his art expression Just as children at first speak indistinctly and in incomplete sentences, so their first art expression is necessarily crude and incomplete from the adult standpoint Teachers find that children's work in the graphic arts helps them understand the children better

The trend in modern art teaching is to encourage creative thinking instead of copying, working with imagination, or recreating impressions in art forms A picture of a white calf with bright orange spots, outlined in a finger-wide strip of blue, may be a truer art product for a child than a precise photographic reproduction

One child hesitatingly drew the sky "down" in her picture of a river scene, then looked up at the teacher as though she did not really believe it, saying as she pointed skeptically out the window at the river, "The art teacher says the sky really does come down"

The role of the modern drawing teacher in fostering creative talent should be first to study the child, to seek an understanding of his rate of growth and present status of maturity, then to encourage his least effort, to relate instruction to his level of development, to make suggestions in harmony with his development and interests, finally, to lead out the child's ideas rather than impose the instructor's own, and to relate drawing and painting to fields of the child's interest

It is better to encourage children to paint what they see and know than to dictate what every child must paint and how he must do it The latter smothers originality and inclines children to copy adult models

Teachers are finding that when more freedom is allowed children in art expression, there is less tendency to copy, less stilted art expression more fluency in expression, and more desire to draw and paint The result is an interest that is sustained to a later age

It is best for the art teacher to keep in the background so as to give the child freedom to express his own ideas One teacher acknowledged that when she stepped aside and got out of the children's way they were able to demonstrate their natural creative tendencies more fully

The children's own art work should decorate the classroom walls If they see only commercial color prints they may be discouraged about making pictures for fear theirs may not be "good"

Teaching of the Graphic Arts in the Unified Program.—Children should express graphically the things that are part of their lives. They will have more inclination to do this when art work is related to every day events at school and to unified projects.

Drawing painting modeling and craft work like music, are most purposeful and effective when integrated with unit studies. What satisfaction one group experienced in their Pueblo Indian unit when they made a large mural sketched the costumes for their play decorated their notebooks with Indian motifs and made miniature clay bricks for a Pueblo! School experiences in which graphic arts play a functional part are countless.

Louis Newkirk (33) has described the integration of arts and crafts work with unit teaching in grades one to six.

The art activities carried on in shop or studio may be the outgrowth of a larger enterprise or project on which the pupils have been working. A study of life in the Southwest South America.

The industries of our country. The second grade in one school designed and made the scenery for their playlet that developed from a nature study project. The fourth grade made and furnished a log cabin as a part of their study of pioneer life. A sixth grade employed the fine and industrial arts extensively in staging a puppet show.

The children who carried on the fruit unit described in Chapter 7 took huge delight in drawing and coloring the fruits and in making decorative compositions before they ate the fruit. Poster paints were used in their art work.

More work with clay is recommended all the way through school for several reasons. Clay is available nearly everywhere or can be obtained at little expense. This medium lends itself to many things the children want to make and working with clay is a valuable form of motor activity contributing to manual dexterity.

In conventional school work each pupil was expected to copy the same model and to achieve the same result. In unified teaching each pupil may work at something entirely different or small groups may cooperate in working on a separate project. The problems and projects are drawn from many sources. Children bring into the art studio the problems that arise through other school studies.

Through their art projects the pupils enhance the attractiveness of the school. It has been found that vandalism tends to vanish when the pupils have a part in decorating the walls and in beautifying the grounds.

Integration tends to offset the tendency to consider art work somehow lower than straight academic studies a relatively unimportant

"extra" to be studied only if time from other subjects permits, or to be reserved for non academic students as an alternative for the stiffer academic courses. This tendency is disappearing in schools where graphic arts are considered a form of expression for everyone that adds richness to school life.

To do effective work in the arts, children need suitable space and materials. The schools in which the best art work is done have studios or work rooms suitably furnished. The art studio and the industrial arts shop should, if possible, be adjoining rooms.

Vera Beach and Mary Bressler (27) give details regarding equipment, space and time arrangements, atmosphere, and care of finished paintings. Recommendations for young children are good materials, long handled brushes, large sheets of paper conveniently placed, sturdy equipment, encouragement of free, sweeping arm movements, a relaxed relatively quiet atmosphere, with an opportunity to paint without interference from other children or adults.

Dramatics

Acting out is a happy experience for children, almost as essential as breathing for normal development. Drama is an interpretive activity. It furnishes possibilities for fun and make believe, for developing creative talent, releasing emotional tension, and clothing the vivid, imaginative ideas that children have.

Dramatization is the working out by the child of his constructive images in terms of action, a natural phase of general physical activity. Dramatic expression calls for imagination and organization of ideas. There are social values to be gained from dramatic experience such as cooperation, self-confidence, and language expression. Participation in dramatics helps give poise and confidence, it contributes to relaxation and the development of correct speech habits.

Young children tend to dramatize anything that strikes their imagination as funny or exciting. In early childhood, dramatization plays a large part in the use children make of their toys. Little girls playing "school," or "house," boys acting Indians, playing "firemen," "aviator," or "soldier," illustrate the urge for dramatic expression through repetition and imitation of what occurs in their environment.

At school the children beg, "Tell us a story", then they present the story dramatically. Seven to ten years—a period when play is decreasingly solitary, increasingly a social activity—is the time for more sustained group dramatization.

The children's reading suggests many ideas for dramatic play. "Robin Hood," pioneers and explorers, accounts of adventure, or

the circus. The rich content and experiences of the unified program should stimulate children to dramatize. The children write plays, make the scenery and costumes, and act the parts.

Dramatics in today's school is interwoven with the entire school program as one medium of expression centering in and growing out of the child's experiences in the unified curriculum.

Young children cannot be expected to produce a finished play. It is the easy spontaneity, the naturalness with which the child works that is all important. The use of any content for dramatics that is outside the child's experience should be avoided. Commercial scripts may be less successful vehicles for dramatization than the children's own inventions, especially below the high school level. In one fourth grade the high spot of the year's experience was giving a play the class had written adapted from familiar themes in which the children used hand puppets they had made from old socks.

Participation in dramatics often reveals to the teacher a child's pent up urges, his emotional stresses and strains. One child who refused to be one of the Three Little Pigs, insisting instead on playing the big bad wolf, indicated in his attitude reasons for his difficulties in social adjustments.

Playmaking has both personal and social values as well as therapeutic possibilities. In *Playmaking with Children from Kindergarten to High School* (New York: D. Appleton Century, 1947) Winifred Ward recommends that children of all ages have extensive opportunity for creative dramatics. The audience is of secondary importance. The play is the thing!

In high school students demand more serious work in the drama including the technical aspects of writing plays, acting, play production, and developing a repertory of plays for school production. Work in this field may stimulate some students to continue dramatic work as a leisure-time pursuit or as their vocation. The establishment of a dramatics workshop or laboratory in both the elementary and the high school is a great stimulus to creative work in dramatics. As in the lower grades, dramatic activities in the leading higher schools center in and grow out of unified projects.

The Industrial and Applied Arts

The industrial and practical arts (including shop work and household arts and crafts) are no longer taught merely as preparation for vocations. Instead, these arts are considered cultural enrichment for all children throughout their school life, from the first grade.

When the industrial arts are taught as isolated, detached subjects they seem like frills in times of economic stringency, and are the first subjects to be lopped off. But when industrial arts are synthesized with academic work and contribute to study units, they have cultural implications for the pupils and seem indispensable.

When the practical arts and crafts, especially the household arts, are taught not as formal lessons but in terms of problems or projects, they can elevate artistic taste and make a larger contribution to community uplift than almost any other feature of the curriculum. How to get time in the crowded schedule is a persistent problem. The answer lies in unified teaching.

When treated as cultural material, the applied arts can be integrated with current projects. They derive their content from the unit under consideration, "Mexico," "Indian life," "The first railroads," "Plastics," and the like. Enrichment results from integrating the practical arts with social studies or science as a core. In the junior and senior high school there should be craft clubs that meet during free work periods. Home mechanics and industrial arts would be featured (33)

The Place of Special Teachers

It is customary in the larger schools to employ specially trained teachers for instruction in the fine and applied arts, in music, science, and physical education. Formerly, it was customary for these specialists to instruct and supervise their specialties with little reference to the rest of the school program. With the introduction of unified teaching, the work of the special teacher has taken a new direction.

Instead of teaching their specialties entirely as separate subjects or demonstrating to teachers methods of handling the arts as formal, isolated lessons that follow a set course of study, the specialists in the arts and crafts act as classroom consultants to the regular class teacher in fields in which children and the room teacher lack experience.

In present day schools the special teacher's work tends to be two-fold: to instruct in his own field, and to enrich the work carried on in curriculum units. Thus, the music consultant may supervise separate musical activities unrelated to class work while helping the class develop and prepare a musical performance for such an enterprise as "Pioneer Life." The special teacher observes children at work on their project and assists them in solving their particular problems. The specialist also develops his own resource laboratory to which children can go for help on their problems (39).

III

Foreign Languages

Foreign language study provides both practically useful skill and cultural values. A second language well mastered adds immeasurably to one's cultural background through the understanding it furnishes of another people. In fact language experts tell us that only through knowing the language of a foreign race or nation can the idiom of a country and its people be fully comprehended for the language mirrors the culture of the people. Cannot these values be obtained through reading a foreign country's literature in translation? is a question often asked in these practical times when people seem to have little leisure to do anything the long way. The answer is only in part. Something is irreparably lost in the translating no matter how competent the translator. True it is better to study a great nation or ancient culture through translated works than not at all if the student cannot read the language but far better for the fullest understanding to learn the language.

Not all American school children can be expected to become linguists. To master even one additional language to a practically useful degree by the time of graduation from high school is a goal that will be attained by scarcely 10 per cent of the high school population. Only those who go on to college can expect to accomplish more.

The remaining pupils who constitute the vast majority of junior and senior high school enrollees can spend their time more profitably on more practical courses (59-62).

Experts agree that to study a language for only one year is useless so far as mastery is concerned. Two years represents the indispensable minimum and four to six are needed for real skill.

An early beginning is recommended for acquiring skill in enunciation but since few American children have any opportunity to use a second language in their daily contacts time spent by most children on a foreign language in the elementary school years would be largely wasted. For Americans who do not travel abroad learning to speak foreign languages is always a more or less artificial acquisition.

How early should the typical American school child begin to study a second language? The answer depends upon his prospects for using the language his facility in the use of his native tongue and his language learning ability. It depends upon the ability of his teachers and their methods and upon the circumstances under which he

practices Since language learning under typical school conditions is a long time process, the learning must begin before the time of anticipated use To begin language study in the seventh grade (about age twelve or thirteen) is advantageous because six years lie ahead in which to achieve real mastery, if the student has linguistic ability and can give the time to study The junior high school years afford an exploratory period for determining a pupil's language learning aptitudes Beginning at the ninth or tenth grade will be the more practical plan for most students, because by that time they will be more mature, the aptitudes for language work more definitely ascertained, and their own English language skills more fully established

At all events, the foreign language students in either junior or senior high school should be a picked group chosen on the basis of predictive evidence as to their ability to learn languages Not everyone should be forced into language study just because knowing languages seems to be synonymous with culture, because language study is supposed to train the mind, or because it is believed to improve one's use of English In the long run these values accrue chiefly to those who are mentally and linguistically gifted

Children who prove to be deficient in ordinary English speaking and writing skills should not spend time on foreign languages No values to be derived from foreign language study can outweigh the need for basic competence in English usage

Pre foreign language study courses are offered today in a number of schools in order to determine the pupils' probable success in languages to provide readiness for foreign language study and as an alternative to the study of foreign languages for those who show lack of linguistic readiness The Horace Mann School for Boys in New York City offers such courses The study begins with spelling, vocabulary, word study, word building, and the derivation of words Using the dictionary is stressed This general language study is integrated with content studies the pupils are carrying on at the time

Sequence in Foreign Language Study.—What should be the sequences in foreign language teaching? Should the ancient or modern languages come first? Benjamin Franklin appears to rate another "first" in his assertion that the traditional sequence in foreign-language work in American schools was reversed He argued that instead of starting with Latin and Greek the modern tongues should be learned first Part of his reasoning was that few persons study the ancient languages for any practical purpose and that teaching would be more economical if the languages students could benefit

from most were offered first in the curriculum. On the basis of this argument the recommended sequence would place French Spanish and German ahead of Latin and Greek. The traditional sequence represents a logical rather than a psychological order and is suited only for the preparation of specialists. Since few high school students study a language for more than two years that language should certainly be French Spanish or German rather than Latin.

Since Latin and Greek are not living languages and few students will ever speak them learning these languages can be postponed to nearer the time the student will need them in connection with college or professional work. The study can then be more intensive and even more formal. Since the dead languages are more difficult for the average high school pupil to have mastered a living language that has a more modern literature lays a good foundation for the later learning of the classical languages. Furthermore a trial at living languages will demonstrate the student's capacity for continued language study.

How Should Foreign Languages Be Taught?—In the modern school a language is never studied as an abstract science apart from its function as a medium of communication. Emphasis is placed on understanding and speaking with grammar playing a purely functional role.

Before the children have attained much reading ability they are given in English the background of the people whose language they are studying. Thus language teaching is cultural from the beginning. To teach a foreign language so that the content is meaningful from the first lessons is more feasible today because the direct method is more widely used and more suitable texts are available. Experts agree that it is a serious mistake to teach any foreign language in a formal or mechanical way.

In modern language study the student becomes steeped in the culture the language represents. To talk like a Frenchman one must act like one as the saying goes. Foreign language learning is enriched through pictures exhibits of materials discussion of life and times of the people through studying the historical background the modern economic social and cultural trends in any literature that is available through bulletins charts maps fiction and biography. The native songs and dances are learned life in the villages and towns may be dramatized. Representatives of the country whose language is being studied are invited to talk to the class and to set up exhibits.

Literature is stressed as soon as independent reading facility is gained, usually after three and one half years for those who begin the language in seventh grade. The students read papers and periodicals printed in the foreign language. Exchange of letters is encouraged.

Modern foreign language study shows much the same trends as elementary school learning and teaching of reading: Learning is done by the "whole method," i.e., reading and speaking complete sentences and phrases, instead of beginning with analyzed parts or grammatical exercises. Vocabulary frequency counts have determined the most frequently used words in the various modern languages. Materials based on these counts are used so that the student may not need to encounter too many vocabulary difficulties in his early reading. Instead of translating everything into English the student "thinks" meanings, gaining concepts in terms of the foreign vocabulary itself. The simple vocabulary is often repeated in the wide reading the student is required to do. Instead of one book a term, he may read several to gain facility in interpretation without translating.

Foreign language work is correlated in every possible way with other studies in which the student is engaged: social studies, English literature, science, or the arts. In one high school, projects in second year French and social studies were combined by the two teachers. The children studied the times of the French troubadours and put on their own original play "Aucassin and Nicolette" based on the old French legends. The teachers of the fine and industrial arts, of music, and of physical education assisted in the costuming, the dances, and the stage settings. The students for a time lived the part of the peasants and the nobility in the period they were studying.

Drill in grammar and vocabulary, as well as in writing, comes later as the student's need for drill becomes more apparent; then drill is individualized to meet each student's requirements.

For further discussion of foreign language teaching in modern schools see references 60-63.

QUESTIONS AND TOPICS FOR STUDY

1. What should be the aims of instruction in literature in the elementary grades? In high school?
2. What methods of instruction give the best results in teaching literature?
3. Should literature be taught as a separate content subject or in integrated units? Debate the advantages of either method.

- 4 Choose some unit or core course and show what literature can contribute to its development
- 5 What is the place of the library and librarian in the teaching of literature?
- 6 Should children be required to memorize poetry?
- 7 What use should be made of dramatics in the teaching of literature?
Outline a project utilizing dramatics and literature
- 8 In what way do the arts contribute to the modern unit activity program?
- 9 What should be the objectives of music education?
- 10 How does music instruction today differ from that of 50 years ago?
- 11 What different phases of music should be included in a well rounded program?
- 12 What is the place of music in unified teaching?
- 13 Select a curriculum unit and show what music and art can contribute to its development
- 14 What is the place of the music teacher in the modern school?
- 15 How can creative expression be stimulated in school children?
- 16 List activities in graphic art that are suitable for children of various age levels
- 17 How much liberty should children be given in carrying out their ideas in practical arts?
- 18 How frequently should art work or music occur in the child's weekly program? How long should the periods be?
- 19 What are the newer points of view toward foreign language teaching in the modern school?
- 20 Write out five additional questions or suggested exercises based on the chapter

REFERENCES

LITERATURE

- 1 Betzner, Jean and Moore Annie E. *Every Child and Books* Indianapolis Bobbs Merrill Co 1940
- 2 Betzner Jean *Exploring Literature with Children* New York Bureau of Publications Teachers College Columbia University 1943
- 3 Dalgleish Alice. *First Experiences with Literature* New York Charles Scribner's Sons 1937
- 4 De Lima Agnes Baxter Tompkins and Francis Thomas J. *South of the Rio Grande* New York Bureau of Publications Teachers College Columbia University 1942.
- 5 De Pew Ollie. *Children's Literature by Grades and Types* Boston Ginn & Co. 1938
- 6 Dickie Donald J. *Enterprise in Theory and Practice* Toronto W J Gage & Co., 1940
- 7 Eaton Anne T. *Reading with Children* New York Viking Press Inc. 1941
8. Eaton, Anne T. "Story Hour in the Elementary School" *Childhood Education* 1939 15 405 407

- 9 Eaton Anne T *Treasure for the Taking* New York Viking Press Inc 1946
A classified annotated bibliography of literature for children
- 10 Groves Ruth *Poetry Its Place in the School Curriculum* *Elementary School Journal* 1944 44 289 294
- 11 Lombard N M *Looking at Life Through American Literature* A Bibliography Los Angeles County Superintendent of Schools 1940
- 12 Lowry Howard F *Literature in American Education* New York City Commission on Trends in Education Modern Language Association 1943
- 13 McKee Paul G *Reading and Literature in the Elementary School* Boston Houghton Mifflin Co 1934
- 14 Moore Annie E *Literature Old and New for Children* Boston Houghton Mifflin Co 1934
- 15 Smith C Alphonso *What Can Literature Do for Me?* New York Double day & Co Inc. 1931
- 16 Smith Dora V *Growth in Language Power as Related to Child Development. Teaching Language in the Elementary School* *Forty Third Yearbook of the National Society for the Study of Education* Chicago Illinois 1944 Part II
- 17 Sweeney Frances Barry Emily F and Schoelkopf Alice *Western Youth Meets Eastern Culture* New York Bureau of Publications Teachers College Columbia University 1932
- 18 Weekes Blanche E *Literature and the Child* New York Silver Burdett Co 1935

THE ARTS

- 19 *Art in American Life and Education* *Fortieth Yearbook of the National Society for the Study of Education* Chicago University of Chicago 1941
- 20 Hartman Gertrude and Shumaker Ann eds *Creative Expression The Development of Children in Art Music Literature and Dramatics* New York John Day Co Inc., 1932.
- 21 Pearson Ralph M *The New Art Education* New York Harper & Bros., 1941
- 22 Progressive Education Association Commission on Secondary School Curriculum *The Visual Arts in General Education* New York D Appleton Century Co Inc. 1940
- 23 Winslow Leon *The Integrated School Art Program* New York McGraw Hill Book Co Inc 1939
- 24 Ziegfeld Edwin and Smith Mary E. *Art for Daily Living The Story of the Oatonna Art Education Project* Minneapolis University of Minnesota Press 1944
- 25 *Art in American Life and Education* *Fortieth Yearbook of the National Society for the Study of Education* Bloomington Illinois Public School Publishing Co 1941
- 26 Association for Childhood Education *The Arts and Children's Living* Washington the Association 1945

GRAPHIC ARTS

- 27 Beach Vera and Bressler Mary *Organizing a Painting Set up for Young Children* *Journal of Experimental Education* 1944 13 77 88.
- 28 Cole Nathalie R *Arts in the Classroom* New York John Day Co Inc. 1940
- 29 Di Amico Victor *Creative Teaching in Art* Scranton Pa International Textbook Co 1942
- 30 Faulkner Ray Ziegfeld Edwin, and Hill Gerald. *Art Today an Introduction to the Fine and Functional Arts* New York Henry Holt and Co Inc. 1941
- 31 Gregg Harold E. *Art for the Schools of America* Scranton Pa International Textbook Co 1941

- 32 Melvin Arthur G. *Methods for Art Schools* New York John Day Co. Inc., 1941
- 33 Newkirk Louis V. *Integrated Handwork for the Elementary Schools* New York Silver Burdett Co., 1940
- 34 Nicholas Florence W., Mawhood Nellie C and Trilling Mabel B. *Art Activities in the Modern School* New York The Macmillan Co., 1939
- 35 Smith Lester C. 'Correlation and Integration of Industrial Arts with Other Subjects.' *Elementary School Journal* 1943 44 208-214
- 36 "Arts in the School" *Educational Method* 1941, 21 51 114
- 37 *Course of Study for Virginia Elementary Schools Grades I VII* Richmond State Department of Public Instruction 1943.
- 38 Lincoln School Staff. *A School for the World of Tomorrow* New York Bureau of Publications Teachers College Columbia University 1939

MUSIC

- 39 Coleman Satis N. *Create Music for Children* New York G P Putnam's Sons, 1922.
- 40 De Lima, Agnes. *The Little Red Schoolhouse* Chapter 12. New York The Macmillan Co 1942.
- 41 Fox Lillian M and Hopkins L. Thomas. *Create School Music* New York Silver Burdett Co 1936
- 42 Glenn Mabelle and Lowry, Margaret. *Music Appreciation for Every Child* New York Silver Burdett Co 1935 40
- 43 Krone, Beatrice. *Teaching Music in the Elementary School* Pamphlet No 4 Progressive Education Association New York the Association 1941
- 44 Mursell James. *Music in American Schools* New York Silver Burdett Co 1943
- 45 Pitts, Lila B. *The Music Curriculum in a Changing World* New York Silver Burdett Co., 1944
- 46 Sheehy, Emma D. *There's Music in Children* New York Henry Holt & Co Inc 1946
- 47 Stinson Ethelyn L. *How to Teach Children Music* New York Harper & Bros 1941
- 48 Wright Frances. *Elementary Music Education* Los Angeles Cal Lyman house 1939
- 49 'Creative Expression Through Music' *Progressive Education* 1927, 4
- 50 *Living and Learning in the Elementary Grades* An Intimate Study of the P. K. Yonge Laboratory School Gainesville Fla University of Florida 1943 Chapter 14

DRAMATICS

- 51 Barnes Emily A and Young Bess M. *Plays Dramatizations by Sixth Grade Children* New York Bureau of Publications Teachers College Columbia University 1932
- 52 Brown Corrine. *Create Drama in the Lower School* New York D Appleton Century Co., Inc., 1929
- 53 Collins Carl A and Charlton Aruba B. *Puppet Plays in Education*. New York A S Barnes & Co Inc., 1932.
- 54 Collins Lillian F. *The Little Theatre in School* New York Dodd Mead & Co 1940
- 55 Hartman Gertrude and Shumaker, Ann eds. *Create Expression* New York John Day Co. Inc., 1932
- 56 Soifer, Gertrude K. *With Puppets Mimes and Shadows* New York Furrow Press 1936

- 57 Thomas, L. A. *Adventures in Dramatics Developed in Grades 1-8 Teachers Lesson Unit Series No 38* New York: Bureau of Publications, Teachers College Columbia University, 1937
- 58 Ward, Winifred L. *Creative Dramatics for Upper Grades and Junior High School* New York D Appleton Century Co, Inc., 1930
- 59 Wells, Margaret E. *A Project Curriculum* Philadelphia: J B Lippincott Co, 1921

FOREIGN LANGUAGES

- 60 Bolton, Frederick E. "Wasteful Foreign Language Requirements" *School and Society* 1942 56 1-4
- 61 Kaulfers, Walter V. *Modern Languages for Modern Schools* New York McGraw Hill Book Co, Inc., 1942
62. Kaulfers W V., Kefauver, Grayson, and Roberts, Holland. *Foreign Languages and Cultures in American Education*. New York McGraw-Hill Book Co., Inc., 1942.
- 63 Tanner, Rollin H. "The Place of General Language in the Modern Secondary School Curriculum." *Education*, 1942, 62, 492-496

Chapter 12

EDUCATION IN INTERCULTURAL RELATIONS

The human relations that prevail in any society determine the welfare and progress of its people. The democratic creed emphasizes respect for human rights and fundamental freedoms without distinction as to race or religion. The goal of democracy is the brotherhood of man, cooperation among groups and nations for the common good, and a wholesome respect for individual contributions without discrimination. The realization of this creed would guarantee equal opportunity for all.

Around the world in every age, tensions among groups and individuals have existed to the detriment of peace and prosperity. Disharmony is produced by discrimination, prejudice, intolerance, and bigotry which result from ignorance and emotional bias. Racial and cultural conflicts threaten individual and national welfare. Hurtful discrimination is shown against minority groups. Race hatred, religious intolerance, social ostracism, and prejudice in employment are rife. It is a normal human trait to resist or reject anything new or strange, whether ideas or manners, that is different from the accustomed and familiar. People promptly become disturbed when foreigners move into their midst. No one appears to have discovered all the factors that account for such prejudices.

Until progress is made in group amity, there is little hope of establishing a brotherhood of mankind. Antisocial forces in our midst must be combated wherever they exist.

Business and industry are showing a growing interest in research on human relations as a solution to various labor-management problems which now impede the establishing of better industrial relations, industrial peace, and maximum productivity in industry. There are leaders in business and industry who feel that modern scientific methods can contribute much to the study of problems of race prejudice and other group hostilities, if research is properly organized and sustained over a period of time. How to do this is a problem for research in the social sciences and for experiments in education.

World War II gave an impetus to a study of human mass reactions because it brought men of all types together in ways not possible in peace. Its lessons can now be applied in peacetime reconstruction

The School's Task in Intercultural Education

Many years ago, the German educator Herbart observed that the study of human relations and conditions was fundamentally important in education. John Dewey has constantly stressed the building of attitudes as the most fundamental task of schools. The responsibility of our schools for educating youth in a democratic approach to problems of human relations is inescapable. Education has a contribution to make to harmonious living among men, but up to the present time this objective has received scant attention in our schools. There is no question that the public school could be one of the best agencies for instructing children in human relations and helping them learn to live together amicably. The school has the added responsibility of molding public opinion and arousing communities to action. A little investigation should indicate the problems that require attention in this area and the needs to be met.

There is considerable evidence that prejudices and biased attitudes are learned, young children are noticeably free of them. As children approach adolescence, discrimination appears, the teacher finds prejudice a stubborn thing with which to deal. As children ape the standards and attitudes of their elders, their social discriminations become more intense as they grow older. The adolescent growing up in an unpopular minority group has all the problems incident to his age intensified by his membership in that group. By beginning with children early in their lives the school can help them develop and maintain an open minded liberal point of view.

Aims and Goals of Intercultural Education

What are the aims of intercultural education and how are they to be met through the schools?

Intercultural education has been defined as education to improve understanding and encourage practices of good human relations among individuals of different cultural groups. Its purposes are to develop attributes which will both prevent harmful conflicts and create unity among races, religions and nationalities to build an enriched culture in which tolerance is a realizable ideal, and to foster respect for different beliefs and points of view and for differences in cultural background.

More specifically educational experts (21) list the following aims

- To foster desirable human relationships in each student's daily living
- To help all groups participate fully in American life
- To improve human relations in the community through the school's educational program
- To develop ability to think critically on a basis of factual information from the physical and social sciences

The school has the double task of developing tolerance among all students while improving the adjustments of the individuals in minority groups. The educational program should help students gain respect for the diverse groups in their community and to improve morale within each group so that all can become part of the social whole.

The problems to be considered in intercultural education include ways of combating attitudes that contribute to prejudice and intolerance, the characteristics of minority groups—racial, religious or cultural—and factors in the assimilation of these groups.

Building Attitudes

Intercultural education is recognized to be primarily a problem in building attitudes. This involves both the unlearning of unfavorable attitudes and the shaping of favorable ones. Teachers must consider how attitudes are formed and how they can be changed. Attitudes follow the usual laws of learning, being formed through behavior which establishes habits of thought and action.

Too seldom have teachers been aware of the attitudes children hold when they come to school, attitudes dominant in the children's home environment. As children grow older they begin to adopt prejudices which the school through its teachings and environment must seek to offset. The school must teach children to honor character and respect ability wherever they are shown, regardless of an individual's particular group allegiance, and it must cooperate with home and community forces in attaining this objective.

Features of the School Program in Intercultural Education

Intercultural education is interrelated with all phases of education from nursery school to college and adult life. A good program for cultural understanding cannot be established apart from other elements of the curriculum. Intercultural education can best be achieved through unified teaching; for this phase of education can scarcely be

compressed within the boundaries of an isolated subject or within the confines of a single textbook. Learning about human relations calls for a lively program of educational experience. Highly departmentalized subject courses do not lend themselves to the fullest types of experience, essential for any true learning in this area. Through the unified approach, contributions from many subject matter areas can be utilized. These learning experiences must grow out of, and be associated with, ideas that seem significant to the students (21)

Planning is needed so that this topic will not be left to chance, but imposition of a ready made program should be avoided, instead there should be cooperative planning on the part of students and their teachers

Intercultural education should permeate the entire life of the school, it should include participation in community life. In short, the program should be planned realistically in terms of the local situation. The program should include all levels in the school and be planned on a school wide basis

Community contacts are important both to provide firsthand experience for students and to influence community sentiment by changing adult attitudes. The school needs the cooperation of labor and business groups, of the churches, and of professional and cultural organizations

Students working in this area can be approached from two angles, according to William Vickery and Stewart Cole (14) through content to be learned and misinformation to be unlearned and through experiences that affect emotional reactions as well as thinking. The approach should be emotional as well as factual and objective. There is a moral angle to be stressed, and pupils need to be given the facts on which to base their conclusions. The 'learning about it' must be translated into action for the learning to be truly effective. A wide variety of learning experiences is needed to meet the requirements of individual pupils

Because local conditions differ, teachers cannot expect to copy a program that has worked elsewhere. A study of existing programs, however, should offer valuable suggestions to teachers who are working in this area for the first time

Teachers recognize certain dangers in undertaking any work with pupils in intercultural relations. Introducing controversial issues is sure to be fraught with explosive uncertainty. Furthermore, when human relations are emphasized group differences may actually be exaggerated and called to the attention of children who might not otherwise have been conscious of them

The tendency in the past to teach the picturesque and superficial aspects of a culture different from our own in such a way as to stereotype peoples of other creeds and races has usually exaggerated differences instead of lessening them. *Teaching in this field must avoid arousing antagonism.* Any minority group will resent over sentimentalization on its behalf.

There are groups of privileged children in nearly every community quite insulated from the problems affecting local minority groups with their differing backgrounds. Even though these children may seldom come in contact with the various problems affecting such minority groups they will inevitably do so as they grow up. Consequently the school should prepare them to face these realities by giving them the fundamentals for intelligent understanding.

As a result of experimentation with summer workshops in intercultural education for teachers W. H. Bristow and his associates drew up a list of recommendations for successful approaches to study in this field (2). Among the points made were the following:

Teachers, schools, agencies and organizations need to pool their experiences in intercultural education to evaluate results and to map out plans for extending practices and programs.

The teaching profession needs to orient itself in these problems and issues and work out a plan for meeting them.

The many agencies and organizations should find some way for active and effective collaboration.

Attention should be given to these problems in teacher training.

A study should be made of the community and the needs of the community.

These problems and issues should be faced squarely in the classroom.

Other authorities wisely advise the teacher not to tackle the impossible nor to attempt to do the job all at once. Pupil and community prejudices can scarcely be uprooted in a term's work.

The Teacher's Role

The teacher's role as a guide and director of learning is nowhere more important than in studies centering about human relations. Leadership in the teaching staff must be developed for this work. Teachers must first examine their own prejudices and modes of thinking about their fellows before they can expect to direct children's thinking about attitudes. It is just as essential for the teachers as for their pupils to gain factual knowledge and to become familiar with cultures other than their own. One of the first problems in any

large school is to meet intolerance within the staff. It is the teacher who must lead in creating within the classroom an atmosphere of good will and harmonious understanding (21).

Methods in Intercultural Education

Within recent years several excellent accounts of practices in intercultural education have been published (2, 14, 16, 21). These publications contain descriptions of programs as they have been carried on all over the United States. These reports indicate that intercultural projects should not be added to the curriculum as just another school subject, but that they are best handled as all-school activities. Intercultural projects can be suited to the maturity of learners all the way from kindergarten through high school. They demand a wide range of instructional tools and devices for fullest development.

In a school operating with an inflexible subject curriculum it may be impossible to have intercultural education except in extracurricular activities. Although the social studies courses seem the most logical place for experience in this field, there are phases that belong in other courses as well.

Here are some of the various possibilities in teaching human relations to school children :

Through already established courses in the social studies, science, literature and the arts

As organized units of work in the curriculum—school-community projects and the like

In connection with many features of life in the school, such as panel discussions, student government, assemblies, clubs, school publications

In out-of-school projects

Through individual pupil guidance

Through parent-school contacts and cooperation

Vickery and Cole (14) describe the many avenues of learning and study in this field :

Books, pamphlets, magazines, and newspapers

Discussions, oral reports, lectures, panels and forums

Pictures, cartoons and posters

Plays and motion pictures

Records and radio programs

Exhibits of folk arts and handicrafts

Field trips and excursions

Festivals and pageants

Athletics and clubs

Folk dancing and social dancing

Recommendations from intercultural workshops conducted in New York City (2) were as follows

Study the cultural backgrounds of a group or community and discuss the contributions of each group

Visit neighborhoods that are largely foreign and observe what is *common to these cultural groups*

Have exhibits of arts and handicrafts, and presentations of folk dances and games typical of various cultural groups

Build a class or school library and draw upon the resources of the public library

Compile scrapbooks on problems of intercultural education especially of cultural minorities

Present plays and pageants based on the lives of outstanding persons representative of different groups

Hold discussions and forums in which representatives of groups are asked to come as participants

Carry out assembly programs based upon intercultural problems

Compile collections of material about international holidays and holy days

Organize groups of radio listeners

In classroom activities use attitude tests references to current news, short stories, current events, and other devices

Analyze prejudices and hold discussions about prejudices

Make a study of scapegoats and "scapegoating" tendencies

Survey propaganda methods used by malicious or designing persons and groups

Carry on broad activities to encourage parent cooperation in intercultural education intended to improve interracial understanding

Organize courses and institutes for teachers and parents to combat intolerance and promote better understanding

Plan unified courses about cultural groups, relating the social studies, science, literature, music and art

Make an analysis of motion pictures as carriers of propaganda, good or bad

Consider national and state legislation affecting the welfare of minority groups

In listing approaches to learning activities of this type the *Sixteenth Yearbook of the National Council for Social Studies* (21) calls attention to the values of personal contact, free and frank discussion among pupils concerning their reactions to others, and the use of literature in giving a point of view

In the intermediate grades there are many activities that help children appreciate the contributions of different peoples and accept cultural differences. As children pass from the upper grades into the high school, they gain wider concepts and a fuller realization of cultural values through their studies of history and geography, as well as of local community life. The extent to which controversial issues can be introduced in the classroom can be judged only in terms of the particular situation and the teacher's skill in guiding discussion.

Authorities in this field urge that the study of cultural differences should not be left to generalizations and abstractions, but that first-hand contacts are essential to understanding. They point out, however, that mere physical contact with situations does not guarantee learning, and that visiting slums may not be the best approach for immature students who need a background of information to which to relate their observations.

The report of the National Council of Social Studies (21), edited by Hilda Taba, director of intergroup education in cooperating schools of the American Council on Education, and William Van Til, director of publications and learning materials of the Bureau for Intercultural Education, was written primarily to aid schools in their task of reducing individual and group tensions—racial, religious, social, economic, and political. The book points out hopeful indications and salient needs in the attempt to democratize human relations in the schools, and describes practices in schools in various parts of the country.

In letters of inquiry to schools where programs in human relations were being carried on, teachers were asked to indicate the reasons for setting up their programs, to describe situations out of which the programs grew, the nature of their schools and communities, features of the programs, and the effects of these studies on the students and their parents. A number of observers also reported on successful practices in schools throughout the country.

The best practices and programs were found to be those which permeated the entire life of the school rather than isolated classroom lessons. These combined the intellectual and emotional in teaching, and related school and community activities. They provided both for understanding democracy and for living democratically. The authors point out that no blueprint for practices in schools can be prepared to fit every situation. Every community is unique in its problems of intercultural education.

The authors further point out that the field is relatively new and that there is much to learn before final answers can be given. This

yearbook contains an extensive bibliography of materials for both teachers and students.

Unit Studies

Emphasis on human relations in existing courses seems the logical place to begin in a school operating on a subject matter basis and much can be done within courses in history, geography, civics science, the arts and literature. However, there is no question that the unified approach, through setting up such study units as described in earlier chapters, makes better provision for learning through democratic experience to gain genuine understanding. In addition, this approach provides for an all school attack on the problem and for community participation.

The units grow out of the immediate concerns and questions of the students. The Social Studies Yearbook (21) gives suggestions for starting the units for collecting data, for developing and presenting ideas, and for culminating activities and evaluation of results.

In the Elementary Grades.—Vickery and Cole (14) describe many procedures in the primary grades that may build favorable attitudes among children in the group who display already established prejudices. Third graders in a Denver school undertook a unit in which they studied the people in their community. They said "We want to find out about these people so that we can understand them better." Through the presentation of a puppet play, "Our Denver Friends," the children discovered common interests that included all their diverse backgrounds (21).

In her *Country School Diary*, Julia Weber tells about a child of German background who stayed at home one day because the children teased him and called him Hitler. The teacher asked the group, "Don't you miss Howard?" When the children said that they did, the teacher inquired, "Then why did you call him Hitler? Hitler does not do right things. Do you think Howard is that kind of a person?" The children did not think so. They agreed that they liked Howard and wished him to return. From then on life in the school was happier for the boy.

What a difference a "Chinese Unit" made in the attitudes of the children toward Orientals in their group in one West Coast elementary school! One part of the project was a Chinese luncheon at which the teacher observed white boys trying to learn from Chinese children how to use chopsticks. Until then there had been only antagonism between the "foreigners" and the rest of the class.

Upper elementary school pupils are susceptible to impressions, good or bad, and highly receptive to social information and influences. They can participate rationally in the discussion of problems arising from differences in racial cultures. This is a good period in the child's development to inculcate liberal ideals and to develop new social awareness.

A sixth grade group in California emphasized the essential likenesses of people the world over, and the contributions that people of different ancestral heritage make to American life. They studied minorities as human resources in the state. Each of five groups of children in the class undertook a study of a different minority group of non-European heritage. Since there was little contemporary material for this study, adult material was reworked by the teacher. Exhibitions were held, talks were given by leaders of the different cultural groups that were studied, and an assembly program was given for the entire school.

In the High School.—Junior high school units may center about the relations of human beings to one another as they are affected by religion, race, or national origin. Another subject for study is the different peoples who make up America. "People in Our Town" is a good topic for ninth grade. In Eugene, Oregon, a ninth grade studied "Race and Nationalities in the United States," and the tenth grade carried on from there with the unit topic, "The Growth of Mankind Toward the Democratic Way of Life." In Springfield, Massachusetts, ninth grade students carried on an investigation of the kinds of people who had made up their community. The students interviewed members of the community with different backgrounds, then selected reports were bound together into a book. An eighth grade in Springfield studied "Contributions of Religions to Present Democratic Procedures." Stress was placed on the "alike-ness" of different religions. Teachers felt that eighth grade was a good place for this topic because the pupils at that age are comparatively free from prejudice.

Vickery and Cole (14) suggest units of three types for the high school: 1. Those which emphasize historical and sociological facts relating to American minority groups, including generalized studies about race and racism. 2. Those which stress democratic principles as applied to minority groups. 3. Those which seek to analyze prejudice and to develop objective, critical thinking about social problems.

In the senior high school, learning activities are provided to give every student the conviction that cultural democracy is essential to America's happiness and progress. High school students in several

Texas communities studied the topic "Americans All" In Dallas, topics considered in this study were civil liberties, city planning, opportunities for employment and housing, propaganda, contributions of minorities in American life Other topics that might contribute to the study of human relations in senior high school are The American people, Understanding the people of the world, Housing, Public opinion and propaganda

The approach in senior high school can be more scientific and may deal with more abstract issues than in the lower grades (21) A New York City high school group included in its unit on intercultural understanding 1 The scientific study of race. 2 The contributions of all peoples to culture in the United States 3 The bases of freedom in the United States 4 The recognition of prejudices

At all grade levels there are certain precautions to be taken in introducing school children to the study of different cultures with which they are little acquainted Humorous condescension should be avoided as well as over-dramatization of cultural differences and stereotypes (16) Authorities recommend that we stress, instead, the enrichment of life that results from contact with different cultures and that the pupils study likenesses as a basis of a common bond among men and their differences as a source of enrichment to any culture

We should avoid overemphasizing or isolating the different contributions of minority groups in American life Any isolated study of such a group might exaggerate differences and result in invidious comparisons

Establishing special tolerance courses or planning programs depicting national heroes and folkways may only arouse tension where it did not exist before Some less direct approach to these problems may be needed

Features of units in intercultural education should include a study of the roots of prejudice, a consideration of the dangers of prejudice, and a search for means of eradicating irrational prejudice

Arts and crafts have much to contribute in any program of intercultural education There are common denominators in the arts for all cultures that can be used to break down barriers Through achievement in the arts, individuals can attain prestige in their group

Life in the School

Life in the school has more to contribute to pupil learning in human relations, perhaps, than direct teaching or textbook study

Good human relationships must permeate school living; democracy is not a subject, but a way of living and acting. It is reflected in the organization and management of school life as well as in the content of courses.

"It is largely through association, through frank and open discussion, through acquaintance and friendship that boys and girls grow in emotional understanding" (21). A democratic atmosphere in school activities has great educative value.

The classroom setting provides many opportunities for practicing democracy and for developing respect for the children from minority groups as the pupils work side by side in the interests of all. Activities in the life of the school—the lunchroom, the student council, the playground, the school paper, assembly programs, pageants, interest clubs, and after-school recreation—can contribute much to better social relations. Inconsistencies in inclusion or exclusion of less-favored group members can be discovered and eliminated so that fair play can gain greater recognition. A child who is new to the school should be made welcome by the class.

The staff of the George School in Pennsylvania believes that the best approach to intercultural education is through furnishing opportunities for students to learn about happy, cooperative living. The entire life of the school gives occasion for experiencing good human relations. Week-end projects in Philadelphia give students further opportunity to work with people in different neighborhoods and with pupils and teachers from other schools.

School government activities and interracial committees provide another way for pupils to gain intercultural experience in their school life. Children can be advised to choose the best person for the job, regardless of his race, wealth, or social position, and to prize efficiency in any job that is well done. The Youth Canteen set up in some schools and communities helps to level inequalities of background. A unit on occupational background gives occasion to go frankly into the matter of discrimination. The school that emphasizes work experiences gives students opportunity to get better acquainted with one another's qualities so that they have a better appreciation of the qualities of those who are frequently the victims of discrimination. (See Chapters 17 and 19.)

Tolerant attitudes toward foreign children can be instilled by utilizing some area of interest common to the entire group.

In the Los Angeles Schools there are dramatic productions and pageants celebrating the great festivals of different races. The school paper carries the news of these productions.

Another opportunity in the school to bring about better human relations lies in individual guidance on the part of teachers and counselors. Children are invited to express their views and to describe confidentially their problems in personal relationships. At the same time, through the guidance conference the teacher gains better understanding of the child as an individual with personal adjustments to make.

Community Activities in Intercultural Education

Interaction between school and community is essential for real experience in intercultural relations, because school represents only a small fraction of the learning opportunity for any child. Furthermore, since community attitudes play the largest part in shaping the child's attitudes, the school must seek to educate the community. A positive program in the schools may be a force in changing attitudes in the community.

The school's program should include work with parents and other adults as well as children. In fact, until adults gain greater understanding in the area of human relationships, it is difficult to go far with the children.

All methods of linking school and community described in Chapter 19 can be used in building a program in cultural amity. Many illustrations for utilization of community resources will be found in the *Sixteenth Yearbook of the National Council for Social Studies* (21). The school can and should serve as a meeting ground for all groups in the community. Usually the school is ahead of the community in intergroup study, but real progress cannot be made faster than the sentiment in the community moves ahead.

It is through the parents that community support can be gained. In the studies carried on in Denver, 'Understanding Our Neighbors' parents were approached individually and invited to attend special programs in which the work of the unit was presented and explained.

Since published materials for studying local problems are seldom available, firsthand experience must predominate in community studies.

The Springfield (Mass.) Plan is one of the best illustrations of intercultural education. This plan (3, 15) was originated to give all children and their teachers respect for racial and religious heritages other than their own. In Springfield the program permeated every level of school life and the community. A film 'It Happened in

Springfield," illustrates the results of these experiments in practical democracy.

The way in which a California community was helped to solve its problems of race prejudice and to change patterns of community living through an intercultural program conducted by the schools is described by Tipton (12, 17, 21). The community, situated in Southern California, contained a substantial proportion of Mexicans and Mexican-Americans. These people had lived in a segregated colony and their children had attended a segregated school, but an increase in enrollment made it necessary eventually to house the older boys and girls in the other school in the community. There the Mexican-American children drew apart from the others and had no sense of belonging. There were conflicts on the playground, and fights were frequent. Some of the teachers themselves held biased opinions regarding the Mexican-American children.

The school problem was found to have its roots in the homes and the community. The Mexican-Americans resented school segregation and other discriminations, such as the ban on Mexicans in the citrus packing plants.

When bitterness became strong, the school council decided to study the problem and work out a solution with equal numbers of children from the two groups. The older Mexican young people in the community were organized in discussion groups to consider the situation.

Two groups of Mexican-American young people, who had already been helped through Americanization programs conducted by two sympathetic teachers, took the lead in setting up an intercultural relations program. An intercultural club composed of seventh and eighth grade pupils was organized by the school council.

Units of work aimed at intercultural understanding were introduced in the eighth grade. These units in the social studies curriculum were designed specifically to help improve understanding in human relations and to overcome prejudice. Later an intercultural club was formed for the adults in the community. A summer program of education and recreation was organized for both children and adults. Following this program, segregation was completely eliminated from the school without serious protest from the community. A community house was established, the summer program was continued by the School and Home Club, a nursery school was established, and a teen-age center was organized. Teaching the Mexican group English was one of the primary objectives of the intercultural program. The motion picture program conducted by the high school played a part in the Americanization of the foreign group.

Funds and services for some phases of the project were furnished by the Coordinator of Inter American Affairs in Washington under the supervision of a neighboring college. The leaders in this project found that it was futile for the school to try to solve these problems alone. It must be a community endeavor with the school taking the lead in planning and seeing the job through.

Americanization Work in the Schools

Nearly 30 per cent of the white population in the United States is of first or second generation foreign stock. Schools enrolling a sizable foreign population have the added task of inducting these children and their parents into American ways. This is too large a subject to consider here in detail but it bears a close relation to the program in intercultural understanding.

The child from a foreign home who comes to school knowing little English presents a challenge to his teachers. These children often from migrant families in remote rural districts or marginal city homes usually cannot progress at the same rate nor can they benefit from all school practices designed for typical American children. Their backgrounds usually have not prepared them for abstract book learning at school and their manners and customs already deeply ingrained often strike teachers as outlandish.

Instead of attempting to uproot the children's habits and tendencies the good school builds on what the children bring with them. These children are encouraged to retain the customs, the arts and crafts, the culture of their parental stock. At the same time that they are being taught English they sing their native songs, wear their own costumes and bring their native products to school. Instead of lesson learning in the traditional sense these children are given new backgrounds and wider contacts. Their knowledge of sanitation and nutrition is improved if this is needed through school projects. They are guided toward more wholesome living and toward vocations that harmonize with their traits and talents. The school becomes a social center for the parents who are reached through the children. High schools in some communities have adjustment departments to which are sent children lacking English and a knowledge of American ways.

Materials for Projects in Intercultural Education

Resources for teaching units in intercultural education include reading materials for pupils, reading materials for teachers and o-

visual aids, bibliographies and lists of other sources of information. Lists and descriptions of the most suitable published materials in this field are contained in the *Sixteenth Yearbook* (21) and the *Seventeenth Yearbook of the California Elementary Principals Association* (17). A bibliography is also given in Vickery and Cole (14).

The Bureau for Intercultural Education, New York City, has a staff which works through the schools in developing intercultural projects. It also trains leaders in this field, furnishes advisory service, and publishes books, pamphlets, and bibliographies on this subject.

QUESTIONS AND TOPICS FOR STUDY

- 1 What should be the chief objectives of intercultural education?
- 2 In what ways does intercultural education illustrate the principles of unified teaching?
- 3 What are some of the practical things your school can do to further intercultural education? How could the community assist?
- 4 Read and evaluate the reports of at least three projects or units described in the following list of references.
- 5 Outline a teaching unit in this field indicating the age or grade levels for which it is designed.
- 6 In what ways can the life in the school contribute to intercultural education?
- 7 What are some of the pitfalls to be avoided in planning for intercultural education through school activities?
- 8 How can parents participate with the school in intercultural education?
- 9 Prepare five additional questions based on the chapter.

REFERENCES

- 1 Brameld Theodore. "Intergroup Education in Certain School Systems" *Harvard Educational Review* 1945 15 93-98
- 2 Bristow William H. "Intercultural Education: Problems and Solutions" *High Points* 1943 25 No 8 14-26
- 3 Chatto Clarence I and Halligan Alice L. *The Story of the Springfield Plan*. New York: Barnes & Noble Inc. 1945
- 4 Dix Lester. *The Montclair Conference on Workshop Planning: Work in Progress*. Series No 4. New York: Bureau for Intercultural Education 1945
- 5 Giles Harry H. "The Fourth R" *Bulletin of the National Association of Secondary School Principals* 1945 29 128
- 6 Hanlon Helen J and Diamond Stanley E. "What the Schools Can Do in Intercultural Education." *English Journal* 1945 34 32-38
- 7 Klineberg Otto. "Scientific Basis for Intergroup Education" *Harvard Educational Review* 1945 15 117-121
- 8 Lasker Bruno. *Race Attitudes in Children*. New York: Henry Holt and Co Inc. 1929
- 9 Meltzer Hyman. "Development of Children's Nationality Preference Concepts and Attitudes" *Journal of Psychology* 1941 11 343-358

- 10 Raths, Louis E. Identifying the Social Acceptance of Children *Educational Research Bulletin* 1943 22, 72-74
- 11 Stagner, Ross 'Studies of Aggressive Social Attitudes' *Journal of Social Psychology*, 1944, 20 109-140
- 12 Tipton Ellis M. 'A Community Intercultural Program' *California Journal of Elementary Education*, 1945, 14 49-57
- 13 Van Til William. 'The Task of Intercultural Education' *Social Education*, 1945, 9 341-344
- 14 Vickery William E. and Cole, Stewart G. *Intercultural Education in American Schools* New York Harper & Bros., 1943
- 15 Wise, James W. *The Springfield Plan* New York Viking Press Inc., 1945
- 16 *Americans All, Studies in Intercultural Education Fourteenth Yearbook*, Department of Supervisors and Directors of Instruction National Education Association, Washington The Association, 1942, 25-41
- 17 *Education for Cultural Unity, Seventeenth Yearbook of the California Elementary School Principals Association*. Oakland Calif the Association, 1945
- 18 'Cultural Education.' *Harvard Educational Review*, 1945, 15 Entire number
- 19 *Education and Intergroup Relationships A Bibliography* (Mimeographed) Washington United States Office of Education.
- 20 "Minority Groups and the Public School" *Progressive Education*, 1935, 12 Entire number
- 21 National Council for Social Studies *Democratic Human Relations Promising Practices in Intergroup and Intercultural Education in the Social Studies Sixteenth Yearbook* Washington National Education Association 1946
- 22 National Society for the Study of Education *International Understanding through the Public School Curriculum Thirty sixth Yearbook Pt II*, Washington the Society 1937
- 23 "Social Foundations of Education. *Review of Educational Research*, 1946, 16, 39-45 Chapter 3 Problems of Intercultural Education.

Chapter 13

EDUCATING FOR WORLD CITIZENSHIP

The establishment of the United Nations has aroused widespread interest among teachers in the necessity for acquainting school children with this great organization and for preparing children to participate in building a better world. Everyone realizes that the kind of world we will have tomorrow depends on the ideals and attitudes absorbed by the children in school today. The purposes for which the United Nations was established cannot be fulfilled unless the people of the world are educated for self-government.

What can be done through education to establish mutual understanding and cooperation among nations? to remove distrust and dissension? to acquaint children with the noble concept of universal brotherhood among men? to make children aware of their coming role in world affairs? Some of the proposed answers to these questions are considered in the following sections.

UNESCO, the United Nations Educational, Scientific and Cultural Organization, was organized in London in 1945. The United States of America became one of the participating members of the organization on July 30, 1946. The charter of UNESCO makes clear the ideals and principles which can be inculcated through education to achieve understanding among nations. Educators have been urged to plan thoughtfully and to work vigorously to achieve a peaceful world through educative forces, and to prepare their pupils now for world citizenship. The program for intercultural education described in Chapter 12 should be recognized as essential in the attempt to accomplish these objectives.

Up to the present, there has been little effort to use education as an instrument for building and maintaining peace. But today educators are asking, "Why not ban war and world strife forever by directing education consciously toward that end?" The program to achieve this objective should begin with the youngest children on the school threshold, and should reach even the most mature individual by means of adult education. Through making education for world cooperation universal, could we not banish international hostilities that achieve only waste and desolation? Let us try to imbue children

with ideals of justice and liberty that will insure well being among all peoples

It is generally accepted today that the dream of world federation can become a reality only as harmony, common understanding, and cooperative planning and working characterize the actions of those in authority in every nation. Education should be a powerful factor in achieving this goal, it is a force that can prepare and inspire the nation's future leaders, now in school, to put these ideals into practical form. In pushing toward these objectives, we should remember the importance of the role of science which can be harnessed to master many of the social problems resulting from this technical age.

The Vision of "One World"

If we are to be successful in achieving lasting peace, it must be recognized that the present United Nations is but the first step toward a federated world and that the United Nations General Assembly is the embryo of a future world parliament. Frederick L. Schuman has observed that our liberal thinkers see no escape from ultimate annihilation except through global government. In their view, "national sovereignty" is considered a stereotype that dangerously obscures the world view (7).

In replacing the present nationalistic system with world government, everyone would become a citizen of the world state as well as of his own nation state. This would result in security for all and in the harnessing of the world's resources for the betterment of all humanity. In this great enterprise, America and Americans must assume leadership because of our country's dominant position in the affairs of the postwar world, because of our control of atomic energy, and because of our demonstrated success with federal government and the democratic way of life.

The concept of 'One World' and a world government that should be superior to national governments may seem utopian. Certainly an entirely new conception of world relations must be implanted in the minds of the maturing children in our schools before this end can be achieved. It is the belief of farsighted American leaders that the drawing up of blueprints for world government is well within the abilities of this oncoming generation.

World Control of Atomic Weapons

H. G. Wells has remarked that civilization is a race between catastrophe and education. Today this grim prediction has an ominous

ring of truth; never has there been such a threat to civilization as the destructive force of atomic fission. The existence of the atomic bomb makes our alternatives increasingly clear: either there will be war and a literal chaos, or there must be world control of this terrible weapon. And such a step, the decision to accept world legislative authority for the control of atomic energy, is generally considered as that extremely important first step toward world government.

This source of energy can be made to light a city or reduce it to ashes. To make it the benefactor and servant of mankind, rather than his destroyer, Schuman warns that we must abandon enough of our national sovereignty to delegate—on a world scale—legislative control over atomic energy to a world agency. As has just been pointed out, our schools must play a vital role in bringing this to actuality. The challenge stands: Can the constructive forces of education build with sufficient speed and effect to prevent the obliterating use of atomic power?

Objectives in Training Children for World Citizenship

In educating children for their role as builders of a peaceful and federated world, there are a number of objectives that the teacher must keep before him, consciously and continually. He should seek for the children: a broad and balanced understanding of the world situation; the ability to consider problems objectively, as honestly from the international viewpoint as in local or national terms; an interest in their relationship to society as a whole; the desire to participate as world citizens in reconstruction; and intelligent participation in activities designed to outlaw war and otherwise to promote and maintain peace. Essential background for understanding their country's role in world affairs can be established for the children through studying American life in its world setting, the concept and nature of federal government, colonial policies, international trade, foreign policy, and world organization.

But background is not enough; nor will these objectives be achieved by the traditional types of school lessons, although ability to read and study texts and to master facts will be indispensable. Approaches to this material should be made through most of the various school activities and should include:

Teaching the ethics of human conduct

Teaching the goals and advantages of the democratic way of life

Establishing attitudes of tolerance, good will, and understanding in human relations

- Improving skills in the use of language and communication as a means of promoting better understanding among peoples
- Demonstrating the use of science in the service of peace
- Educating for an economy of production
- Recognizing religion as a force in giving meaning and value to human living and in building character

Considerable difficulty exists in determining where to draw the line between these approaches and the listing of the preconditions which are important for the establishment of a favorable situation in which to carry out this program. Among such preconditions the teacher should seriously consider the building of sound physical and mental health, providing vocational preparation for everyone, providing parent guidance and developing home school cooperation and encouraging community enterprises to improve living and to develop programs of adult education. How thin the line between may be is illustrated by the last item listed. Where an adult education program includes work on world problems it is apparent that the school's activity lies clearly in the field of approaches.

The School's Task

In educating children to build a better world, no school operating solely within classroom walls can conceivably carry out the above program, but the educational authorities in every community can begin planning for active school participation in this task and exert leadership in local, national, and international settings. First of all, teachers will need to inform themselves about the social problems and political issues confronting the world today. Since education for a better world is a topic that cannot be confined to any one school subject, it must involve whole school effort and planning.

What can the classroom teacher accomplish? What are some practical suggestions for making a beginning in this program? The school's approach to establishing this program must utilize all the ways and means described in Chapter 12.

Teachers everywhere can awaken children to the new concepts through courses built around the work of the United Nations. There should be emphasis on the aforementioned objectives in existing courses in social studies, science, and the arts. Units can be set up within these subject matter areas or where the program is sufficiently adaptable, the focus can be on one major topic, such as "*One World in the Making*." Content for the study can be drawn from all subject matter areas. There can be all school projects and programs.

enlisting the efforts of children at all age levels. Assembly programs and festivals, radio programs, motion pictures, forums, debates, publications, clubs, excursions; in fact, all features of life in the modern school are avenues for weaving the international theme into education.

Courses in social studies should stress cooperation among nations. In this field the objectives should be to help the students understand the world they are living in and to appraise and evaluate conditions of life in the United States and in nations other than their own as a foundation for understanding. Equipping school children to create a better world when they become adult citizens means that they must be taught something of international relations. The older boys and girls should study the Charter of the United Nations and the provisions of UNESCO to gain an understanding of the contribution of these documents in building a better world. In time, courses on the work and organization of the United Nations may become required studies throughout the upper elementary grades, high school, and college.

The Children Participate in the Planning

Educating our children and youth to work for a better world affords another opportunity for unified teaching. This is not a topic that can be squeezed into an already overcrowded curriculum as a new subject; it is an all-embracing program as broad as education itself. As in the case of other curriculum units, the children must participate in the planning; with teachers to guide, they must do their own creative thinking in this area. There are no ready-made programs that can be adopted as the pattern to follow in curriculum planning for this significant undertaking. Each community will offer different problems and opportunities for developing topics in this vast area. The child's home should be utilized as an educational force. Children of all age levels can participate, with increasing responsibility for planning as the high school years are reached. The life in the school will be affected by and become a part of this new program. Community activities should be brought into the school program in all the ways pointed out in Chapter 19. Every traditional subject matter area—social studies, science, literature, health, languages, arts and crafts—and all the new and old tools of instruction will be needed to implement the school's program for building world citizenship.

The learning processes include all approaches that can raise questions in children's minds, give them new understanding, and stimulate their creative thinking about challenging problems. These include

group discussion and planning, reporting information and ideas gained from reading and study, participating in realistic experiments in school and community, studying graphic materials, hearing reports of experts viewing exhibits, preparing programs, participating in forums and original writing

Practicing democracy, living harmoniously together and sharing, working together shoulder to shoulder, and participating in other co-operative activities such as those outlined in Chapter 12 afford actual experience in living together amicably as adult citizens must live to create a better world

School Programs in Educating for a Better World

So far, most of the school programs and courses with this broad objective are in the planning or experimental stage. Perhaps it is just as well that no fixed pattern has become established which would hamper teachers, students, and community leaders in working out the plan that is best adapted to local needs and that could most readily fit into a program of national and international scope.

The New York City Program.—New York City has taken the lead in organizing all school courses on the United Nations and world citizenship. Soon after the cessation of hostilities in World War II, the public schools of New York City began planning for a remarkable forward step in education. New York is fortunate in having the United Nations meeting in the city, a fact which has stimulated teachers to plan for "Better World" education of all children and youths enrolled in the schools. A brief report of this program, prepared by Benjamin Fine, was published in *The New York Times* (May 19, 1946).

This curriculum, entitled "A Better World," is being developed from kindergarten through junior high school in an effort to give school children an understanding of the need for world cooperation and an appreciation of the work and operation of the United Nations as a force for world peace. A source manual of practical suggestions has been prepared for the guidance of teachers which presents the objectives, concepts, and generalizations appropriate for each age and grade level (15). Practical suggestions are given and activities are outlined to help teachers interpret the work of the United Nations meaningfully to children. It is intended that all the subject areas will be utilized in developing this broader course. Stress is placed on democratic living in the classroom and on the value of the students' participation in their own school councils as a means of giving

them a more realistic conception of cooperative procedures in handling matters that affect group welfare

Examples from local, state, and national history should be cited to impress school children with the importance of the work done by the United Nations. The students learn that cooperation among nations is essential to successful social, economic, and political relations.

The children should learn as much as they can about the aims and operations of the United Nations Charter and the structure and functions of the United Nations organization. They should learn that the work of the United Nations reflects the will of the people, that the charter, like the constitution of the United States, is not fixed and static but is designed to grow through amendment, and that the charter's provisions originate with the representatives of the people themselves.

Ten broad objectives for pupils, to which this school wide curriculum is to be geared, are

- 1 To develop respect for the individual human personality
- 2 To understand the importance of working together, assisting one another, and being considerate of one another
- 3 To acquire a sense of devotion and responsibility to family, class group, school and community
- 4 To comprehend the need of interdependence in group life, community life, and national and world affairs
- 5 To understand that as a loyal American every person is also a responsible member of the world community
- 6 To learn that nations, as well as individuals need one another
- 7 To understand the necessity of real friendship for people of all races, of all religions, and of all nations
- 8 To realize the importance of economic and social security for all
- 9 To practice responsible freedom
- 10 To show the American spirit of fairplay, justice, and understanding in respecting the rights of others and minority points of view

Sufficiently mature pupils should consider blueprints for peace and world government that have been evolving through recent international conferences—Bretton Woods, Dumbarton Oaks, the Crimea Conference, San Francisco and the more important meetings of the United Nations. They should study global relationships which could be established among all the nations on earth.

Even the youngest school children can carry on activities that develop a cooperative attitude. Through music, games, and stories children can learn to appreciate children in other lands. They can

be encouraged to send clothes or food to needy children abroad. As the junior high school years are reached, current events and the study of the newspaper are recommended to foster a better understanding of world friendship. Suggestions for upper grade activities include holding an assembly debate on current important issues before the United Nations, carrying out a clothing drive for needy children abroad, preparing a show depicting the leaders in the United Nations, giving an original play based on contributions of foreign cultures.

Many films, available to the schools, are recommended to implement teaching the United Nations theme and numerous publications are listed as aids to teachers and as study materials for the pupils.

The New York City Board of Education sponsors a series of radio broadcasts to the schools on the subject of the United Nations.

In a number of senior high schools and colleges "Security Council" organizations, modeled after the United Nations in every detail, have been set up to give students a more realistic conception of this organization through mock participation. The sessions patterned after those of the United Nations, invite lively and intelligent discussion. The students themselves take the leadership in organizing the student body according to the world pattern. Documentary materials obtained from the UN serve as study outlines.

Education to Preserve Peace

Physical fighting as a means of protecting individual or collective welfare, or for settling disputes, may have been necessary for survival in primitive times when men lived precariously because of their dependence on hunting, but hunting as a mode of life exists today only among a few scattered aboriginal tribes. War in these modern times reflects man's fear, greed, and ignorance, and denies the democratic principles of dignity, equality, and mutual respect among men.

Every intelligent person recognizes that peace is the only durable foundation for building a better world because the world cannot move forward until war, with the destruction it entails, is abolished. The time is past when great armaments can be depended upon to preserve peace. "Since wars begin in the minds of men it is in the minds of men that the defenses of peace must be constructed." These opening words of the UNESCO Charter suggest the course the schools should follow.

UNESCO provides the educational machinery through which differences between nations can be eliminated and all the nations on earth

be linked together in the interests of peace. A copy of the constitution of UNESCO will be found in the booklet, *The Defenses of Peace* (12)

Every effort is being made to establish UNESCO as an international educative instrument for peace and international understanding. This institution is equipped to provide the educational background for establishing peace and security.

Teachers can become the guiding influence in building for peace through the thinking they require children to do and the attitudes they inspire. If teachers around the world would join in a crusade to outlaw war through education, permanent peace would be nearer at hand. Among the older teachers today there are many who feel that more aggressive activity on their part following World War I might have helped prevent the world from making similar mistakes twenty years later.

What a wonderful world we could have if all our energies and resources could be utilized for peace! All the fruits of the earth are needed for prosperity. Destruction of these resources through periodic war will in time permanently impoverish the earth. Now with the threat of widespread destruction through atomic energy, control of this new weapon so that it may become an instrument of peace instead of war is the only hope of civilization. Without control destructive forces will gain supremacy and we shall be headed for the last and most destructive war of all. It is no idle threat that the time may soon come when an atomic arms race will result in blotting out all the great cities on earth and destroy civilization. As Dr. Albert Einstein points out, "It is easier to denature plutonium than to denature the evil spirit of man." It will take every educative resource at our command to build the better character traits that are so essential to establishing good will among men.

Nothing is more important than education for peace, if we are to have a stable world in which people can live in security and children grow up healthy and happy. In a sense peace education is a phase of health and safety education. If we can bring up just one generation of youth around the world which despises war, desires peace and earnestly seeks every means for preserving peace, then in time war can be abolished. We must get rid of the war ideology completely and prove to the children through every possible means that war making is obsolescent, a primitive method for settling disputes that has no value for modern man.

Any teacher knows that inculcating the habits and attitudes that will create a peaceful world must begin even before the children enter

school, with their parents and with their home influences. The professional educator in the community knows that he can influence these factors only indirectly, but he cannot escape responsibility for leadership in this phase of the task if education is to make its influence felt before formal schooling begins.

A number of 'peace postulates' have been drawn up by the American Psychological Association which suggest the role that psychological and educational factors play in promoting attitudes that lead to war or peace. Several of these postulates are

War can be avoided. War is not born in men, it is built in men.

In planning for permanent peace the coming generation should be the primary focus of attention.

Racial, national, and group hatreds can, to a considerable degree, be controlled.

Condescension toward 'inferior' groups destroys our chances for a lasting peace.

The fundamental desires of the common people of all lands are the safest guide to framing a peace.

The trend of human relationships is toward ever wider units of collective security.

Educational Programs to Insure Peace

There is no single blueprint for insuring lasting peace through education, but schools all over the country are exploring constructive programs that emphasize the need to work for world peace.

In the lower grades the children can learn about the beauties of the world we live in, of its valuable resources for happy living and useful achievement. They can learn what peace means in intimate home living and in school and playground groups. They can begin to sense the gains possible through constructive, rather than destructive, influences. They can learn to live and practice the Golden Rule. They can learn how to settle their disputes and arrive at agreements co-operatively rather than through physical force.

Pupils through the grades and high school can learn how languages may be a source of confusion or may be used in the interests of peace. They can gain in attitudes of tolerance toward minority groups and peoples of foreign nations. They can learn how through rational means organizations such as the United Nations reconcile opposing views and conciliate hostile forces among nations or peoples anywhere on earth.

Courses in the social studies, history, and economics should stress cooperation among nations rather than extol the heroes of war.

Youth organizations can demonstrate brotherly love and cooperation. Children can operate their own peace councils. Students can learn about UNESCO and the possibilities it offers for building lasting peace. In time more material will be published which both teachers and students can read in studying this timely topic in all its ramifications.

All the children in coming generations need to know the truth about the destructive forces that war brings in its train. Instead of the glorified aspects of war—the slick uniforms, the martial music and feats of daring—the stark reality of the death and destruction, the grief and anguish, the suffering and horrors that brutal war inflicts on human life must be graphically portrayed. Children can be as easily conditioned against attitudes favorable to war as they can be conditioned against any other unfavorable attitude or action. The killer instinct, if there is such a thing, can be eliminated or transmuted into a constructive force. Each generation in turn must learn anew to hate war and all its accoutrements, for there is no biological inheritance through which this attitude can be transmitted.

Interesting research was carried on during the war to determine children's attitudes—their interest in war toys, the war theme, and the like. It was found that children who had a wholesome life at home and a full program of stimulating activities at school cared less for playing war or playing with war toys than children from impoverished homes or those who attended schools that offered little challenge to their childish interest in physical combat. Another finding was that European children played war and favored war toys much more than children in America where war is not traditional, not accepted as necessary, desirable, or unavoidable. American children tend to 'rough house' at certain ages just as normal children around the world do, but the war theme is less predominant in their play. So too, in their reading, children raised in countries with a war tradition naturally prefer that their history reading highlight war, whereas other children find equally exciting themes in different content.

One step in teaching peace that the school can take is to discourage the reading of publications that glorify war, and another is to provide such an interesting program of activities harmonious with the children's normal interests that the war theme will have little place in their work and play.

Schools enrolling a substantial proportion of gifted children can do no better than to broaden the curriculum for these children who are destined to be leaders by introducing the topic 'A Peaceful World' and letting their creative minds go to work on it. The topic

leads out into every possible avenue of human activity, including science and invention, and thus offers a challenge to gifted students

What the Community Can Do

With good leadership the community can carry its share in peace education in various ways. Among these are

Working with the school, offering services to the school, and furnishing speakers and leaders for activities

Using the local library facilities to supplement the school's resources and to conduct programs of adult education

Giving all citizens through forums, institutes, and adult education classes, a better understanding of critical issues in international affairs confronting the world today, and considering ways to preserve the peace

Taking active steps to discourage military display and, instead, taking measures to enhance human welfare in all its aspects

Working through available community organizations to influence public sentiment in the maintenance of peace

What the Home Can Do

Giving children the background for understanding their part in building a better world begins with parent education, because the parent's influence counts most of all in building attitudes before school days begin. Children tend to copy the attitudes of their parents. As the child's first teachers and chief guides in character development, parents are in a strategic position to inculcate in their children the qualities that will help to make them good citizens. School and home can benefit mutually when they unite in this common enterprise. Methods of home and school cooperation are described in Chapter 21. These will suggest the channels through which the school can direct and assist parents in home education of children for peace and world citizenship.

What Each Nation and the World Can Do

Proposals have been made to channel the planning for these educative enterprises in the interests of world security and unity through the United Nations. It has been recommended that an international board for peace education and world understanding be set up in UNESCO.

Dr. Julian Huxley, executive secretary of UNESCO's Preparatory Commission, reported that the organization's permanent active

ties would fall into three main groups organization, facilitation and stimulation, surveys to discover gaps in present activities and private information, and participation in actual projects Six commissions are to be appointed, one each in the fields of education, mass communications, libraries and archives, natural sciences, social sciences, and the creative arts

One of UNESCO's goals is to put on a secure basis the welfare of every individual under 21 years of age around the world The objective is to improve the well being of children everywhere so that their minds and bodies can be responsive to new learning Raising standards of health and nutrition, and providing essentials of shelter and clothing for everyone are basic objectives

One of the first tasks of UNESCO is the reconstruction of educational systems devastated by the war Reducing illiteracy that prevails throughout the world is to be a major undertaking

The reduction or elimination of language barriers would also promote peace and strengthen world unity

It has been proposed that courses be organized and teaching materials be prepared by leading educators and writers for use internationally

Another proposal is to establish on an international basis teachers' workshops where conferences and symposia could be held, and to organize among educators of all the nations discussion groups on a common meeting ground for consideration of plans for international education The establishment of an international university would serve as another center to strengthen educational activities for world government and lasting peace

In conjunction with the UNESCO committees, a reference library is to be established, consisting of several sorts of material.

Teacher training materials

Information on world government for adults

Informational material for children

Collection of slides pictures, movies, posters, exhibits and other materials for classroom use

Educators have proposed that UNESCO might undertake the revision of history textbooks to eliminate biased and one sided nationalistic statements A universal history book presenting an impartial and fair account of the contributions of every nation should be prepared for general school use Similarly, other school texts could be revised to eliminate bias or prejudice These new materials should be compiled by a panel of historians from all over the world

The books could be published in all languages and be used by all nations. Then all children would be learning the same facts about one another. Materials such as the New York City Schools' manual (15) should be distributed in all languages throughout the world.

Dr. Alexander Meiklejohn has proposed the establishment by UNESCO of an *Institution of International Study and Teaching*, an institute that would foster study of the work of the United Nations and unite the viewpoints of philosophers and political leaders around the world. The recommendation is that such an institute be established and maintained in the vicinity of the United Nations headquarters. One function of this institute would be to provide for the exchange of students and teachers among the different nations.

Another proposal is that UNESCO sponsor traveling panels to advance science and education throughout the world. Others would set up programs for intercultural education in all countries designed to emphasize the understanding of social relations in school courses, and to pool funds nationally and internationally for broad educational research.

Steps in the UNESCO program include: a. A survey of methods of teaching international understanding in the schools. b. Improvement of textbooks so that they will build international understanding. c. Cooperating with the World Health Organization to utilize the experiences of all countries for the development of healthy young people through school instruction programs. d. Attacking the world problem of illiteracy. e. Drafting a world charter for the teaching profession.

Everyone is carrying out the aims of UNESCO when he works for peace through international understanding. Children can participate in the work of UNESCO through the Junior Red Cross and the Boy and Girl Scouts. Teachers are advised to make the work of UNESCO a subject of conversation and public report. Local and national organizations are urged to study and support the UNESCO program.

Educators around the world are organizing a nonofficial international association of teachers which would have the same relation to world problems of education that the National Education Association has to educational affairs in the United States. Delegates from 28 of the leading nations have met in a world conference of the teaching profession to draft plans for establishing a world alliance of teachers to improve the status of education around the globe, to outline courses for teaching children international understanding, and to promote peace through education. Another question under con-

sideration is how the more fortunate countries can assist those whose educational systems were devastated during World War II. Educators believe that this organization can raise teaching standards and that its services will prove useful to the governments represented.

In our own country the U.S. National Commission on International Educational, Scientific and Cultural Cooperation will work with the United States Government in the field of international education.

Reforms in our world are never accomplished all at once nor do they last for all time. Banishing war, building a better world and training for world citizenship are problems whose solution must be sought for by each succeeding generation, beginning with its children and transmitted as a part of the social, cultural, and political heritage.

QUESTIONS AND TOPICS FOR STUDY

- 1 Give several reasons why you believe that schools should give attention to training for world citizenship and the planning of a better world.
- 2 How does this topic illustrate the principles of unified teaching as outlined in Chapter 5?
- 3 What recommendations should be made by educators around the world to leaders planning activities of UNESCO?
- 4 Outline a total school program for training children in the ideals and principles of world citizenship.
- 5 Outline a basic unit in this area of study that might be developed with children of a particular age or grade level.
- 6 What aspects of the international situation can elementary pupils understand through their school studies? High school students?
- 7 Outline some of the things your community can do to forward the movement toward world peace.
- 8 What are some of the ways in which home and school could cooperate in this enterprise?
- 9 Make a report on the most recent developments in the work of UNESCO.
- 10 Write five additional questions based on the chapter.

REFERENCES

- 1 Carr, William G. *One World in the Making*. New York: Ginn & Co. 1946.
- 2 Cherrington, Ben M. *Methods of Education in International Attitudes: Contributions to Education* No. 59. New York: Bureau of Publications, Teachers College, Columbia University. 1934.
- 3 Dolivet, Louis. *The United Nations: A Handbook on the New World Organization*. Preface by Trygve Lie, Secretary General of the United Nations. New York: Farrar, Straus and Co., Inc. 1946.

- 4 Fisher Lois *You and the United Nations*, Chicago Children's Press Inc 1947
- 5 Masters, Dexter and Way, Katharine, eds *One World or None a Report to the Public on the Full Meaning of the Atomic Bomb* New York McGraw Hill Book Co. Inc., 1946
- 6 Mulford Herbert B. 'Whither UNESCO' A Problem in Educational Public Relations *School and Society*, 1946 63 273 275
- 7 Schuman Frederick L. "Toward the World State" *Scientific Monthly* 1946 63 5 19
- 8 Stoken, Spencer *The School and International Understanding* Chapel Hill North Carolina University of North Carolina Press 1933
- 9 Tchou M. T. *The Teacher's Part in Developing World Citizens* Bulletin Vol 8 Washington Department of Art Education National Education Association 1942
- 10 Zook George F. "Progress in International Culture and Educational Relations" *School and Society*, 1946 63 17 22
- 11 Willkie Wendell. *One World* New York Simon and Schuster, Inc 1943
- 12 *The Defenses of Peace* Documents relating to UNESCO, the United Nations Educational Scientific and Cultural Organization Part I Conference Series 80 Part II Conference Series 81 prepared by the U S Department of State Washington U S Government Printing Office, 1946.
- 13 National Education Association Committee on International Understanding *International Education through the Public School Curriculum* I L. Handel and G M Whipple, eds *Thirty sixth Yearbook of the National Society for the Study of Education*, Part II Bloomington Ill Public School Publishing Co 1937
- 14 National Education Association *Teaching About the United Nations Charter* Washington The National Education Association 1945
- 15 *A Better World* Bulletin of the Board of Education New York City The Board of Education, 1946
- 16 *A Report on the International Control of Atomic Energy* New York Doubleday Co., Inc. 1946 (Committee report to U S. Department of State by David Lilienthal chm.)
- 17 *United Nations Organization A Handbook of the UNO* Prepared by the Current Events Editor of the American Education Press Inc. New York Charles E. Merrill Co. 1946
- 18 *The Weekly Bulletin* Published by the United Nations. New York International Document Service Columbia University Press
- 19 *World Citizenship* Five units on world citizenship Social Studies Curriculum Monograph SS 55 Los Angeles California Division of Secondary Education Office of the County Superintendent of Schools 1946 (Mimeographed)
- 20 *World Programme of UNESCO* Lake Success N Y Educational Liaison Section United Nations Department of Public Information, 1947 (Mimeographed)

The Columbia University Press New York, is the official publisher of United Nations documents

Chapter 14

SKILLS IN THE UNIFIED PROGRAM

A school program that disregards skills and knowledge will be ineffective because there are certain minimum skills that everyone needs for competence in daily living. These skills include the ability to speak, understand, read, and write English, basic numerical concepts and skills in arithmetical computation, and study skills that enable a person to obtain information for himself.

The 'three R's' were the backbone of elementary schooling in Colonial days; consequently, they became firmly associated with all the rugged virtues of pioneer life. For that reason even today, school patrons look askance at any threat to their supremacy in education.

More questions are asked about the place of these skills in the modern school than about any other feature of the program. The tendency of the newer schools to incorporate the three R's in unit activities so that they lose their old preeminence and even their identity serves only to increase the number of queries. Among the most frequent questions teachers and parents ask are these: Are the three R's still taught? What is their place in the unified program? What is the relative emphasis given to these skills? How much time each day should be given to them? What methods are used to teach the skill subjects? Are textbooks still used? How can the school maintain high standards in the three R's and still have time for activities? Are satisfactory results in skills attained by the newer methods? Do the authorities advocate dividing up the school day, 'half and half,' for the three R's and other activities? Can all the skill a child needs be obtained through the practice that comes with activities and curriculum units?

Answers to some of these questions will be indicated in the following sections.

Importance of the Three R's

The three R's representing the basic elements of learning, always will have an important place in education so long as people have income taxes to compute, budgets to make out, reports to prepare, busi-

ness to transact, instructions, notices, and newspapers to read, and ideas to share. In fact, these skills are more essential than ever in this scientific and industrial era, with its accelerated tempo in every area of life. No individual can be too well equipped with the skills required for participation in a world in which technical ability and knowledge play so large a part. A school program from which children do not emerge with these basic skills automatically at their command, learned to a point of practical usefulness, cannot be justified. The child who lacks reasonable command of these skills will be handicapped all through life.

Enthusiasts for progressive practices in education sometimes advocate more creative work in the arts and sciences, even if at the expense of the three R's. This viewpoint is short-sighted, because thorough training in skills is indispensable to creative work in any area. Children who have automatic control of writing, language, and number skills, in addition to special talent for creative work, will produce more effectively by virtue of their command of basic skills. This is not equivalent to saying that the grounding in the three R's must necessarily precede all efforts at creative achievement, but the implication is that the two go hand in hand.

Limitations in Traditional Practices

The teaching of the tool subjects in the primary grades has been meaningless because it has been artificial or unnatural. The skills taught in formal lessons have had no relation to the child's life in his early developmental stages. Instruction in skills has been given prematurely to children who were not yet ready to learn. Children have been rushed along so fast that the lessons teachers have tried to teach have been only partly digested. The artificial achievement which resulted has been at best impermanent or, in many cases, has interfered with later successful acquisition of skills. Children have failed in the first grade and have had to repeat work they attempted to do without the necessary basic preparation; they have failed in the upper grades because learning was made difficult by a lack of suitable preparation in the lower grades (8).

New Viewpoints in Teaching the Skills

Purposeful Learning.—The chief difference between the way in which skills have been traditionally taught and the way they are taught today in the better schools is the difference between drilling

mechanically with a view to future use, and learning skills through actual use in daily life experience

Skills today in the better schools are considered means to ends rather than ends in themselves. Spelling is practiced not merely to learn to spell some words correctly, but to spell accurately something that needs to be written, to prepare a legible message or set of directions, phonics drill is provided not to give pupils skill in phonics, but as an aid to reading with understanding, and number drill is provided to aid in computing the price of a lunch, scoring a game, or making a purchase.

The skills can be used intelligently in everyday living only when they are learned with understanding. Other advantages in learning skills through meaningful experience are the greater facility with which learning takes place, the greater interest pupils show in learning, the better retention of material learned, and a more facile transfer of skills to new learning (2). Experiments prove that the tool subjects can be learned effectively while they are being put to some real use—learning to add the costs of the picnic supplies, looking up the words which must be spelled correctly in a composition, computing the average height and weight of all the pupils in the class, or raising a garden and marketing the produce. In fact, teaching experience and experiment indicate that relating each skill to its actual use is the most effective way for the child to learn it.

Paradoxical as it may seem, carrying on some activity that is worth while on its own account may net as much gain in arithmetic, reading, spelling, writing, and language development as setting out directly to 'learn some arithmetic.' This is the answer to the perennial question: 'Can the children have interesting, happy experiences at school and still become proficient in the fundamental skills?' Certainly they can—and do. Factual evidence from educational experimentation proves that skill in the tool subjects is gained through the problem solving characteristic of a unified program (1, 5, 7, 11, 17).

The skill subjects will not be learned to the degree of practical usefulness for life if they are taught only as handmaids to subject matter content studied in school—history, nature study, civics and the like. For example, reading should not be taught solely to enable the pupil to read the history book, for within a few years his reading needs will be far removed from the particular history book that seemed so important earlier.

It has been customary to consider that the skills should come first in the educational process, appropriate work for the primary grades, and that content work should come in the higher grades when

there is sufficient skill in the three R's to serve as a foundation for assimilating textbook material. The newer point of view is that the skills do not necessarily mark the beginning of the educative process with the content subjects following later, as in the traditional curriculum, but that both areas move ahead together, the one constantly facilitating the other. The skills are learned while they are being used purposefully.

Since the three R's represent intellectual inventions of the ages, children should be given some insight into the cultural development of these inventions. The three R's are not social studies as such, but have social significance and value. Spelling, writing, reading, and language usage are means of communication. Arithmetic permeates our social relations. Instead of divesting the skills of all social implications, the new trend in teaching is to emphasize their social value.

Meaning Comes First.—Research in the psychology of learning indicates that the easiest elements for the young child to assimilate are not the simple mechanical ones, such as phonograms in reading, number combinations, or strokes in handwriting, but meanings. A whole word, though it consists of twice as many letters, may be easier to learn than a syllable because it stands for something that is meaningful, similarly, a number relation may be easier to learn than a mechanical response to a number abstraction. The ineffectiveness of artificial drill in learning skills is due to the fact that it prevents children from learning with understanding and has little value when genuine problems arise. (See Chapter 3.)

One way to improve the teaching of skills is to improve all features of the program so that it will afford more application of skills which will mean more to children. Understanding first, then repetitive drill, is the more productive approach. When understanding comes first, less repetition is needed, and the learner is more willing to practice, for he sees the relation to his larger objectives of achievement in skills.

To learn a thing, the pupil needs to experience it from every angle, whether it is ounces and pounds in arithmetic, the meaning of "thrift" or the correct forms of pronouns to use. This principle suggests the need for practice of the three R's in a wide range of applications.

Mental Maturation as a Factor in Learning the Skills

The prevailing notion has been that the learning of such skills as reading, spelling, writing or arithmetic is purely a mechanical process.

in which regular practice, discipline, and systematic texts are the chief ingredients. Extensive research with disability cases offers convincing evidence that external factors for learning may be entirely satisfactory, yet the pupil may fail to learn the skills in which he has been faithfully drilled. In explanation, psychologists point to the pupil's lack of sufficient mental maturity for the intellectual tasks imposed on him, or to his lack of interest or poor motivation for the task.

For skills to be learned with understanding, the tasks must be properly adjusted to each pupil's maturation level. This will mean individualizing the learning of skills for pupils at each particular grade level. It will also require some preliminary inventory of previously learned skills and readiness for learning to insure that the lessons can be studied with success by each pupil. To say that the tasks in learning the skills are appropriate to the child's mental level is virtually the same as saying that the activities will be interesting to the pupil, or can easily be made so, since a pupil's interests tend to be consonant with his mental maturity.

Interrelationships Among the Language Arts

The term Language Arts includes reading and all phases of oral and written language. There is growing evidence of the intimate relationships among all phases of the language arts: reading, the ability to understand when others read aloud and to read for one's self orally or silently, oral use of language, so that others can comprehend and written language, including composition, handwriting and spelling. All the language arts are related because all of them deal with ideas expressed in words, printed or spoken, all require knowledge of vocabulary as well as sensitivity to correct grammatical form. The outline that follows shows the interrelationships among the language arts.

AN OUTLINE SHOWING THE INTERRELATIONSHIPS BETWEEN READING AND LANGUAGE

I READING

From reading the pupil gains knowledge of vocabulary, sentence structure, grammatical form used in speaking and writing.
Reading enriches vocabulary.

From reading the pupil derives generalizations about words and word building.

Reading develops language sense and gives practice in using language correctly.

Reading furnishes ideas to write about and furnishes a basis for

discussion Study type reading requires reporting orally and in writing

Reading furnishes the stimulus and ideas for creative writing

II ORAL LANGUAGE

Listening with understanding and speaking furnish background for learning to read These skills are a valuable accompaniment to reading all the way through school

Oral language is the basis of readiness for reading

A *Listening*

Reading comprehension depends upon comprehension of spoken language

Listening to correct English helps to improve recognition of the same expressions in print

Listening enlarges the pupil's stock of word meanings

Sensitivity to the use of words in sentences is an aid to reading

Through listening the pupil becomes accustomed to hearing stock expressions that will recur frequently in reading

The pupil hears the teacher explain what words in reading mean and what the text says

He listens to other children read to reports of reading and to recommendations of books to read

B *Speaking*

Pupils read with greater ease things they have talked about

Oral statements made in class discussion become reading material when recorded and edited by the teacher

Oral language reveals the experiences a child has had, which in turn suggest reading interests

The pupil reports on his reading orally

There is discussion of books in class

The pupil reads aloud

The class works on word pronunciation—both for speaking and for oral reading

The same phonetic skills are used in speaking and reading

The pupil explains the meaning of reading text and pictures

Pupils dramatize a story they have found in their reading

Pupils give a book assembly or school program based on reading done in curriculum units

III WRITTEN LANGUAGE (including spelling)

Writing reinforces word recognition and sentence sense. It increases awareness of the characteristic features of words

Writing is an aid to the pupil in building a sight vocabulary

Writing words from memory aids word recognition

The pupil writes reports of his reading

Writing is done in reading exercises

Vocabulary development, the study of word meanings, word building, the use of the dictionary in writing are all aids to reading. The study of sentence structure, attention to grammar and punctuation in writing aids reading.

The pupil tends not to use in writing words that are not in his reading vocabulary.

The pupil writes reports about his reading, notices about new books and other reading material.

The pupil writes material to be read by himself and others in the class. What he writes is easy for him to read because it is in his own language, and consequently the text is meaningful to him.

The content of textbooks in these skills used today reflects a high amount of overlapping. Study-type reading and language exercises are very similar. Spelling words are drawn from reading context. Exercises in writing are related to reading and similar practice in all the language skills results from the use of glossaries and the dictionary. More and more there is a tendency to unify the teaching of these skills and, in doing so, to make them the practical tools they should be for school life projects.

Arithmetic

What is arithmetic but another language, the language of number usage? Learning arithmetic means far more than learning number computation; it means essentially learning to reason with number terms, to use number language. If the pupil cannot think in terms of arithmetic language he cannot *do* arithmetic no matter how skilled he may be in computing in mechanical fashion. The ability to solve arithmetic problems requires knowledge of things, the capacity to think and to reflect, to remember facts and to understand the precise meaning of number terms in the particular problems in which they are used.

Numbers are abstract symbols representing attributes of things. For this reason they are difficult for young children to understand. The value of using concrete experiences as a basis for number work and relating arithmetic to children's projects is to give meaning to operations with numbers. Number concepts are learned through generalizations built upon continuous daily experiences with number situations.

Comprehending problems in arithmetic presented either orally or in writing requires the ability to understand language in general as well as the special terms of arithmetic. Written problems require the ability to read with understanding the special language of arithmetic.

Since learning to do arithmetic depends so largely upon ability to think in terms of the language of number this skill is gained best through work with actual problems that arise in the pupil's daily experiences. Then the terms come alive with meaning the pupil becomes thoroughly familiar with them and can readily assimilate them.

Children need to sense number relations size and quantity, before they are asked to respond with pedantic exactitude to $3 \text{ plus } 5$ when they have no notion what the numbers signify. Precision in dealing with these abstractions is achieved by little children only at great cost of time and nervous energy whereas the meaningful relations develop normally in educative experiences at school.

Teaching Skills in the Unified Program

The modern school lays the foundation for learning the skills through experiences that arise informally in work on problems or in study units. The advantages of developing skills through curriculum units are several. In the first place skills take on meaning when they are learned through problems arising in daily classroom activities the pupil makes immediate use of the skills he learns in lifelike situations.

The child reads to find out what he needs to know in developing his project. He measures counts estimates adds or subtracts without thinking. Now this is arithmetic. When he records in writing the results of his investigations he is practicing spelling handwriting and composition and preparing reading material at the same time.

The children in one first grade drafted thank you letters to a parent who sent them some apples. They received practice in several *R's* simultaneously not in the form of boring drill but under the strongest possible motive the need to convey their feeling of appreciation to one who had given them a pleasurable experience.

In the second place greater economy is achieved by teaching skills through the unified program and curriculum units because the natural relationships among the skills can be utilized and the waste of isolated work in unrelated content can be avoided. In relating the skills to a central problem each skill need not be drilled in a separate period daily. The child working on his nutrition study utilizes the skills of reading writing, spelling language and even arithmetic. In all of these he obtains practice while he is working on his single theme. What wasted effort results from attempting to teach reading spelling and writing as three disparate subjects each with different content?

An additional economy in teaching skills through unified projects lies in the fact that no undue time is wasted mastering specific skills.

before they are needed, or that may never be needed, for the problems confronting the child at his particular developmental stage determine what technique should be learned and how much skill is needed.

In the third place, practicing skills as a part of problem solving, such as the studies in the unified program require, enables pupils to gain flexibility and adaptability in meeting the practical problems that arise every day.

One cannot expect the child working in the unified program to attain the same level in skills at a given grade level that the old formal teaching standards demanded, but rather to gain, as he goes along, the actual skills that are needed, learned in such a way that they are practically useful to him then and later.

Teachers need to acquaint themselves with the learning opportunities for skills that various school experiences afford and then to utilize these opportunities for stimulating growth in skills.

Detailed suggestions for teaching the basic skill subjects—reading, arithmetic, spelling, writing and language—through school experiences and curriculum units have been presented by the author in another publication (8).

Chapter 15 describes the utilization of children's experiences and activities as a foundation for first grade work in the skills.

Safeguarding the Skills in the Unified Program

Every skill, language and reading especially, can be employed at one place or another in the unified program, but experimentation with even the richest and most stimulating units proves that the teacher cannot expect the problems that arise in connection with unit studies to develop all the techniques a child will need to solve the problems. This does not mean that half the day must be reserved for formal drill in separate skills, but it does necessitate appraisal by the teacher of the points at which the pupil needs more direct practice than incidental learning provides, plus consideration of the most efficient ways in which this practice can be obtained. Time should be scheduled in the daily program for all children who need more systematic practice in the skills. One of the chief advantages of the more flexible unified program is that differentiated instruction in the three R's can be provided for individual children.

No matter how much unification is achieved, learning at school is at best artificial, and the purposes for which children learn are not so genuine as those that activate the learning that takes place outside. The alert teacher will continuously seek genuine applications within the children's range of experience.

New Skills

In the unified program, training in skills is not limited to the traditional three R's. There are many other techniques that should be learned: the finding, organization and use of reference materials; making reports, leading participating in, and interpreting discussion, analyzing a new project and organizing the work so that it may be carried out effectively, and establishing standards by which to judge a piece of work. Closely related to such skills are several characteristics which should receive comparable attention. Among these are the acquiring of good work habits; estimating accurately one's abilities and limitations; and seeing a job through to completion.

The techniques in the fine and industrial arts also constitute new skills to be developed: the systematic arrangement and preparation of materials, accuracy, and the actual skills involved in painting, sewing, cooking, woodworking, typewriting and the other practical arts and crafts. Related characteristics here would include proper care of materials, time scheduling and habits of healthy living.

Delaying the Introduction to Skills

Since experimental evidence proves that experiences not only furnish a meaningful background for assimilating the skills but actually produce some achievement in them and since concrete experience rather than abstract symbols are more appropriate for primary children, the newer trend is to delay systematic training in the skills of reading, language and arithmetic until the pupils have a foundation through their informal work and play experiences for learning these skills with understanding. (See Chapter 15.)

Progressive teachers show more inclination than traditional ones to take into account the knowledge and skill a young child brings to school, to build on this foundation and to expect the child to develop in a stimulating environment the capacity to advance his skills. *Gradually the child is eased into more systematic practice.* This method produces not only more permanently learned skill but a more favorable attitude toward learning, in contrast to the discouragement and rebellion produced by premature, enforced drill. Further, it frees the child's time for more worthwhile accomplishments.

There is evidence in the references at the close of this chapter that any apparent loss due to delay in the beginning of formal instruction is compensated through more rapid and permanent learning later.

Postponing formal drill necessarily shifts more responsibility for systematic practice to the higher grades, but this works no hardship on teacher or pupils if one philosophy pervades all elementary school years.

Since children are now legally compelled to stay in school until 16 or 18 years of age, there is less rush to cram into the lower grades all the preparation in reading, spelling, and arithmetic a pupil needs for his life's work.

Skills are never completely mastered in the child's early school years, but they continue to be learned even in his adult life. The acquiring of vocabulary in the mother tongue is a good illustration. Similarly, mathematical skills continue to develop. The best service the school can render the pupil is to show him methods of attaining mastery of techniques which will serve as a foundation for continuous development of those skills.

Simplifying Instruction in Skills

The child's needs in the three R's are few, but they are real. Any skill to be applied effectively in problem solving must have been thoroughly learned. A few basic skills under automatic control are better than a smattering of many half learned facts and rules that the individual is powerless to apply. The modern school teaches what is practical in the three R's, and no more.

Instead of including the most unusual and absurd words in the dictionary because these constitute "hard" learning tasks that "strengthen the mind," spelling as a subject has been whittled down to the basic words, especially the "demons" everyone needs to master for every day writing purposes. So too, in all the other skills, when the criterion of practical usefulness is applied in listing facts to be learned, much of the drill formerly needed for mastery can be eliminated and time is freed for more productive experiences.

Thinking of the three R's as tools rather than as separate content subjects justifies the new trend toward simplification. Power to develop greater skill is gained more easily through work with simple processes than through over-elaborate drill on a multitude of unrelated facts from which no generalizations can be deduced.

Sequential Learning

There is more tendency nowadays to break up the learning of any skill into a series of finely graded well-organized learning sequences, presented to children step by step no faster than their

demonstrated learning rate allows. This provision is essential in all skills, but especially in arithmetic and language, and, to a degree, in reading. Sequences mastered through practice, one by one, build a secure foundation and prevent the confusion so many children experience when work in skills is not finely graded and systematically organized. The rates at which individual children of similar age progress through the sequences will not be uniform.

Teaching the Skills in Advance of Use

Should skills ever be taught in advance of the time they are needed? Should there ever be "over-learning" beyond the child's immediate needs? The answer to both questions is certainly, if children are to be fully equipped to meet problems competently as they arise. Lifesaving or first aid is a good illustration of skill best learned in anticipation of its use. But it would be poor economy to learn skills so far ahead of their application that they would disintegrate through disuse. Children may reach the age at which they need a skill as a tool and lack it. For example, a time might come when reading ability and composition skill are needed to undertake a study of Switzerland. It would be shortsighted to defer reading or writing instruction until the children are ready to study about Switzerland.

Building skills is not done in a day. Experience after experience is needed over a period of time to perfect skills. Acquiring skills is partly a developmental process that parallels the maturation of the child's nervous system and his intellectual growth.

Older children who understand the significance of the skills they are learning may safely store up a small reservoir of skill against the day when they will need the speed and accuracy that comes with automatic control over essential techniques. An illustration is found in the multiplication tables. These cannot all be learned at once, but they will inevitably be needed for working problems quickly with 100 per cent accuracy. Consequently, achieving mastery somewhat in advance of immediate requirements is justified if a meaningful foundation has been laid, if the children are mature enough to understand the purpose for which they practice, and if practice is given first to the most frequently used facts.

The Need for Practice

Skills cannot be perfected without practice. The purpose of drill is to improve performance, to clinch facts or principles and to commit

to memory through repetition the skill to be learned. Otherwise there may be uncertain control, half-formed skills, mediocre performance, amateurishness, or an attitude of indifference, or casualness. How much efficiency would there be in army maneuvers without preliminary drill?

The school recognizes the pupil's need for drill to establish habitually correct responses, and so provides it for perfecting skills. Drill can be made more intensive with better results at age eight or nine than at six, chiefly because by that time the child is more mature and usually understands the meanings basic to drill.

Mastering the Demons

There are certain arbitrary usages in the three R's which everyone is obliged to follow to conform to established custom. In some cases, as in spelling, forms appear to violate all rhyme or reason. These conventions create in all the skills "demons" which are by their very nature hard to learn and require drill to insure permanent learning. Incidental practice would not in a lifetime result in mastery of these "demons." Thus there must be formalized instruction and thorough drill in arithmetic, spelling, writing, reading, language, typing, or "fingering" at the piano. Extensive practice is required for permanent learning of the correct forms.

Some of the least used skills require disproportionate practice. For example, few people ever need to carry out such computations in fractions as $\frac{7}{8} - \frac{5}{12}$, but in order to perform this operation the few times it arises, intensive drill is needed in a variety of problems.

Children Recognize the Need for Practice

Practice at school is not necessarily synonymous with teacher dictation, mechanical drill, or regimented assignments. Any alert observer notes how rigorously children will drill themselves when they have some genuine learning purpose. It is through their own self-imposed drill that they master some skills before school age.

Through meeting challenging problems in their daily work, children soon come to sense their need for better technique and to ask for help. For example, in writing a note a child senses his need for more skill in writing or spelling. Perhaps he feels he could make faster progress if he could read better. He may need the "six times" table in his grocery store unit. As soon as children sense their lack, they can more readily be motivated to practice for mastery. This insight

seems to reach a peak in normal children around eight or nine years of age a period that coincides with genuine interest in drill for its own sake

During these years children will undertake memory work and enter speed contests just for the fun of it. Practicing spelling can be lots of fun' as one nine-year old enthusiastically expressed it. At this age a child will practice over and over to perfect his skills. He usually enjoys accumulating facts just as facts and will pester every one around him for answers to such questions as 'What is the population of Texas? How large is Missouri? What are the six smallest states? How long is the Hudson River? Which is the third largest city in the United States? How many square miles are there in the state of New York?' He may set to work with zeal to learn the names of all the railroads in the country or the mileage between all the principal cities.

This interest in drill can be exploited or it can be legitimately utilized by the teacher. If it is capitalized at the right time large gains can be made by children with minimum conscious effort. However not all children show interest to the same degree or reach their maximum peak of interest at the identical moment.

The chief questions that arise in providing for drill are: How can drill be individualized to fit a particular child? How much drill is needed to perfect the skill in question? How can drill be made meaningful and related to actual problem solving? How much responsibility should be placed on the child for drill? How should drill be distributed in the pupil's daily schedule? How can the results of drill be tested?

The traditional program with daily drill regularly scheduled in every skill automatically provided for the checking that must now be definitely planned for in unified teaching.

Improving Practice

'Drilling literally means boring but whether or not drill at school is boring depends largely upon how it is handled. Drill to perfect skill need not necessarily be forced or artificial. It can be related to familiar, understood content. Practice of skills for technique then becomes identified with the learner's purposes.

Perfecting skills requires (1) Practice in graded sequences (2) Selection and isolation of certain phases of the skill for more intensive drill, (3) Regularity in practice (4) Psychological distribution of practice in time. Incidental learning would rarely fulfill these conditions.

Drill need not be boring if a lively approach is made toward mastering skills. To prevent boredom, teachers should keep drill periods short and enthusiasm high, they should introduce short drills in the spirit of a game definitely linked to the unifying activity in which the group is engaged. Many aspects of drill can be made more palatable in the form of games, such as drilling on correct verb forms through telephone conversations, or practicing arithmetic combinations by keeping scores or solving magic squares.

Drill that is not interesting in itself can be made so through association with something that is interesting. Visual aids and graphic methods, instead of mere verbalism, should be used whenever possible.

There appears to be little need for "crutches," artificial devices for mastering skills, so long as children are mature enough for the work and only the simpler basic processes are taught.

Day by day regularity in practice is a safeguard in perfecting skills. The drill period should be considered the teacher's diagnostic and examination period, rather than a regimented work period with uniform assignments for the entire class.

Motivating drill is achieved partly through making improvement a matter of pride, as in perfecting handwriting, in improving spelling or in phrasing sentences. The child must be helped to assume responsibility for outcomes. Praise should be given liberally for successful achievement. The improvement of work habits serves as a foundation for more and better skill.

The Question of Speed

How much attention should be given to speed? In answering this question, the point to consider is that speed is usually an indication of mastery. As a skill becomes habitual, speed usually increases automatically as, for example, in piano playing, hand writing, typing, reading or arithmetical computation. However, slow workers are sometimes aided by suggesting to them the concept of pace, the notion that by giving conscious attention to the matter, speed can be increased. No child should be urged to intensify speed so much that his partially learned skill breaks down, but every pupil should practice the needed skills in such a way as to gain a reasonable tempo in his work.

Improving Skill Through Diagnosis

The doctor's diagnosis does not cure the disease but the diagnosis is essential before he can determine how to put the patient on the

right track to health. Similarly, in teaching skills, before introducing the next stage in learning, the teacher should make inventories of what children have already learned and how securely the basic facts are retained. There should be frequent checks of progress, objective tests simplify this checking process. The child's difficulties should be studied, not solely from the standpoint of the skill itself, but from that of all the child's reactions and learning at school. The child may be helped to analyze his difficulties. Enlightenment may be gained through skillful questioning.

Individualized Practice in Skills

Individualizing drill is economical because children's needs for drill are so largely personal. Differing rates of learning should be considered in planning drill for a group of children. The advantage of such individualized practice is that work on skills can be adjusted to each child's mode and rate of learning. Undifferentiated drill produces boredom and disinterest because some in the group will be forced to practice what they have already mastered, while others will not yet be ready for the prescribed drill. Generalized drill for specific faults may be useless or even harmful.

In an individualized drill program, the work is based on a diagnostic inventory of each child's needs to determine the extent to which he will benefit from drill and the sort of drill he needs. Individual standards and goals are set for each child, and he keeps his own graph to record his progress. The individualized drill needed in such a program can be improved through the use of attractive teaching materials, including charts, workbooks, worksheets and pads, and work type material in basic texts.

Children should be grouped within the class according to their achievement levels and the types of difficulties they experience, since formal standards of promotion that require uniform achievement of all pupils at each grade level are not in line with the findings regarding individual differences (see Chapter 22).

How Much Practice in Separate Daily Periods?

There is no rule answering the question, "How many minutes a day and how often during the week should practice be given in the different skills?" The more important question is "How much drill and what sort of drill does this child need to perfect his skill so that he can use it in everyday living?"

The different skills vary in the extent to which they require independent drill. Some are more difficult than others. When we consider the first six or eight school years, arithmetic appears to require the greatest amount of formal drill, spelling the next, certain matters of written language form and handwriting somewhat less, and reading the least. The order depends upon the amount of opportunity the child's day affords for indirect practice in the different skills and the extent to which the processes themselves are meaningful to the individual pupil.

The teacher decides how much time to set aside in separate periods for work in skills. Not every child must necessarily spend this time on drill if he has no need for additional skill. Furthermore, during this period not every child will be covering the same ground. Some may need further diagnosis of difficulties, others may require checking up or individual practice. Individualized practice in skills is provided for all children who have particular learning difficulties. Short periods of daily drill appear to be far more effective for retention of the skills practiced than longer drill periods at irregular or infrequent intervals.

So far as possible, practice should be based on problems related to school projects.

Evaluating Outcomes in Learning the Three R's

Evaluation of outcomes in skills must be made solely in terms of functional efficiency.

As the result of these reforms in teaching the three R's, the evidence cited in Chapter 24 shows that the following results can be achieved:

- 1 The children can employ their skills successfully when a practical problem arises
- 2 They actually have more skill to apply at each stage in progress
- 3 The learning achieved is more permanent
- 4 The children's attitude toward further practice is favorable rather than antagonistic
- 5 Less time is consumed in teaching so that more time is freed for broader learning experiences

QUESTIONS AND TOPICS FOR STUDY

- 1 Contrast the traditional and the newer methods in teaching the skills. Summarize the new trends.
- 2 What should be the basic objectives in teaching reading, spelling, arithmetic, language, handwriting?

- 3 What is the place of the skills in the unified program?
- 4 Select a typical unit and show how the three R's can be taught in connection with the unit
- 5 Can activities in the unified program be depended upon to give a pupil all the skill he needs in the three R's?
- 6 Indicate how arithmetic should be taught in the unified program. Select any grade level for this purpose
- 7 How can the unified program contribute the most to the improvement of children's written expression?
- 8 Under what circumstances may the unified program fail to advance the child's skills in the three R's?
- 9 Is there any evidence to show the value of incidental learning of skills in the first two grades?
- 10 Cite some of the experimental evidence that proves the value of teaching skills in conjunction with the unified program.
- 11 What are the values to be derived from systematic drill?
- 12 In what ways can drill be made more meaningful to children and produce more effective results?
- 13 Should the elementary teacher continue to reserve one class period daily for practice in each of the essential skills?
14. What significance do the facts concerning individual differences have for learning the skills in the modern school?
- 15 What is the place of the textbook in teaching the skills?
16. Do the principles stated in this chapter apply equally well to high school teaching? Why or why not?
17. Write five additional questions or suggested exercises based upon the chapter

REFERENCES

- 1 Benezet, Louis P. "The Story of an Experiment." *Journal of the National Education Association* 1935 24 241 244 301-303 1936 25 7-8.
- 2 Brownell William A. "When Is Arithmetic Meaningful?" *Journal of Educational Research* 1945 38 481-498.
- 3 Caswell Hollis J. *Education in the Elementary School* New York American Book Co. 1942. pp 177 ff
- 4 Cole Luella. *The Elementary School Subjects* New York Rinehart & Co Inc. 1946
- 5 De Lima Agnes. *The Little Red Schoolhouse* New York The Macmillan Co., 1942
- 6 Fernald Grace. *Remedial Work in the Basic Skill Subjects* New York McGraw Hill Book Co Inc. 1943
- 7 Harding Lowry W and Bryant, Inez P. "An Experimental Comparison of Drill and Direct Experience in Arithmetic Learning in a Fourth Grade" *Journal of Educational Research* 1944 37 321 337
- 8 Hildreth Gertrude H. *Learning the Three R's* (2nd ed.) Minneapolis Educational Publishers 1947
- 9 Lane Howard A. "Child Development and the Three R's" *Childhood Education* 1939 16 101 104

- 10 Melvin Arthur G *Methods for New Schools* New York John Day Co, Inc 1941
- 11 Meriam Junus L *Acquiring Tools Incidentally* Research on the Foundations of American Education Official Report 1939 American Educational Research Association Washington The Association 1939 pp 62-67
- 12 Reed Homer B *Psychology of the Elementary School Subjects* Boston Ginn & Co 1938
- 13 *Course of Study for Virginia Elementary Schools Grades I VII* Richmond State Department of Public Instruction, 1943
- 14 Lincoln School Staff *A School for the World of Tomorrow* New York Bureau of Publications Teachers College Columbia University 1940
- 15 National Education Association Department of Rural Education *1941 Year book* Child Development and the Tool Subjects Washington The Department 1941
- 16 The Three Rs *Progressive Education* 1928, 5 99 192.
- 17 Staff of the Maury School Richmond Virginia *Teaching Reading in the Elementary School* New York Progressive Education Association, 1941 (Now the American Education Fellowship)

Chapter 15

UNIFIED LEARNING EXPERIENCES FOR BEGINNERS

At the age of six, most children have intellectual interests and a need for social experiences that the home environment can scarcely satisfy. These children have emerged from babyhood, they are beyond the nursery period and are rapidly reaching out for contacts with a larger world. Their urgent "what" and "why" questions demand answers. They eagerly ask how things work, where the common objects in their environment come from, how various things are made, and what effect certain actions have on materials with which they work and play. Children of this age tend to experiment with everything that falls into their hands. It is the logical time for the child to go to school so that his eagerness for new experiences can be satisfied through experiments and explorations under the guidance of trained teachers. The legal compulsory school entrance age of six seems justified by the growing intellectual needs of six year olds. Unless a transition from home to school is made at about this time the child's development may be delayed.

Learning Through Experience to Insure Readiness

Teachers everywhere are becoming aware that learning through organized experience constitutes the best introduction to school life for the typical six year old. One reason is that experiential learning tends to insure continuity from the child's home life and any preschool or kindergarten experiences he may have had to his school life.

Another reason is that the experience curriculum gives more scope for play, which is the child's essential way of learning. Through play the child is continually working at problems that grow out of his concerns and fit his mentality. Working out their problems through play is a stabilizing experience for children of beginning school age.

A certain little girl felt more comfortable when she had brought her mother's old skirt and shoes to school so that she could dress up and play "mother". The teacher did not forbid this play as a waste

of time, but, with all the children's help, equipped a corner for "playing house" at a suitable time of day.

Failure in the First Grade

Failure and retardation have been prevalent in the first grade largely because the program has not been adjusted to the developing needs of beginners (5). As many as 25 per cent have failed in the first year at school, not because of ill health or absence from school, but because of the children's lack of readiness for a program that is remote from their experience (1). Antipathy or apathy results when children's purposes and interests are disregarded. Teaching the skills prematurely tends to have a disintegrating effect on the child's personality, resulting in resistance and negativism, and causing antagonism between teachers and their pupils. Instead of being the friends of little children as they might wish, teachers often have had to become rigid disciplinarians. The attitudes and habits of failure that the children acquire carry over into the upper grades.

These failures and retardations would be major problems even if the school enrolled only normal children from good homes, but most school enrollments include children from sub-average homes and children with poor linguistic backgrounds, limited experiences, physical handicaps, slow mentalities, or no kindergarten training.

Here is the picture one primary teacher gave of her first grade class: In September, 25 or 30 six-year-olds came to school for the first time. A few, possibly two or three, came from ordinary English-speaking homes; the rest came from homes where play, toys, books, music, cleanliness and etiquette, and respect for oneself and others were largely unknown. Obviously these children were not ready to begin a formal program of reading and other skills.

Another teacher tells of a foreign-born mother who sends each of her children to school promptly at the age of six and expects each child to begin academic work at once. The latest of her children to enter first grade is little Lan Sing. In response to every question the teacher puts to him, the child can respond only one thing: his name. "How old are you?" "What would you like to do?" "How are you today?" The reply to all questions invariably is a solemnly enunciated, "Lan Sing." He lisps as he says it, and the result is amusing, but the teacher asks, "What can I do for this child and others like him who understand not a single word of English?"

Obviously, in their first months at school, these children need an induction period during which they can become better acquainted

with their environment, acquire some degree of fluency in language, and gain a feeling of security as a result of enjoying happy experiences with the group. Nothing could be more discouraging to these beginners than textbook lessons dealing with abstractions and unfamiliar concepts.

Unified Learning Experiences for the First Grade

The primary teachers themselves have been the most urgent in voicing a protest against formalism and subject matter emphasis for beginners. They have appreciated, more than administrators or parents possibly could, the advantage of a more gradual transition from home to school, the need for more time for children to assimilate their new impressions, and the advantage of the experience curriculum as preparation for verbal learning and the use of symbols. They have advocated a program for beginners that will insure every child's having learning experiences that contribute to wholesome all round growth. They realize that to learn anything well, children must learn through firsthand experience. Furthermore, to be learned effectively, new skills and facts must be met many times over in a variety of concrete situations. Such skills might be learning to put things back in their places, to count or to tell time correctly. The new concepts may include understanding how ice is formed, how birds build their houses, or what "one half" means. Children's conceptions of time and space, of quantity, and of cause and effect develop through ever widening contact with things and forces in their immediate environment.

Learning through organized experiences contributes to readiness in the primary grades, first through occupying children's time during the first months at school with childlike activities rather than formal book work and second, by supplying, through those very activities, background for learning new skills and concepts.

Through the experience curriculum children in the first grade can actively try out their powers by experimenting, planning, questioning, dramatizing, and expressing their creative ideas with all sorts of materials. Even at this age they can learn to think for themselves instead of depending too much on adults.

The physical activity involved in learning through experiences is in itself a major advantage for the six-year old who is physically energetic, normally "restless," and only gradually developing powers of sustained attention. Children of this age require frequent changes of activity to relieve tension.

Readiness for Learning Social Adjustments and Work Habits

The activity program not only builds readiness for academic learning such as the three R's, but it also aids growth in social adjustments, work habits, and character traits. Through class activities under the guidance of an able teacher, children learn to share, to take turns, to get along with others in the group, to be tolerant, and to work co-operatively. They grow in ability to think ahead, to plan their work, to make and keep a schedule, to become self-reliant.

Learning through experience makes for democratic living. Instead of the teacher's dictating every move the children make, they themselves learn to plan their activities with the teacher's aid, to make choices and decisions, and to work together toward a common goal. Here lie the possibilities for making social adjustments and building character which are needed as a secure foundation for a happy, useful life.

Training in health habits begins with the natural situations that arise in daily life at school—keeping clean, resting well, avoiding contagion, developing strong bodies through exercise, observing safety rules, and eating the right food for glowing health.

Instead of reserving sex education for the home where the subject tends to be neglected or for the high school where it comes too late, the experience curriculum treats situations that involve this topic as they arise and in the most natural way as a normal phase of life.

When the teacher centers activities for beginners around firsthand learning through experience, she has an excellent opportunity to observe each child's adjustments with professional eyes, to size up his strengths and limitations, his interests and talents, and his problems and difficulties. Through these close-up observations, the teacher begins to build a diagnostic picture of each child which proves to be indispensable in planning the next steps in his training and which affords a basis for objective parent conferences.

The groundwork for unified learning experiences in the first grade should be established in the program of the modern kindergarten. This program can readily be adapted to the needs of older children. The modern kindergarten, in fact, furnishes the best possible foundation for learning through experience in the first grade.

Features of Organized Learning in the First Grade

What are the main features of organized learning experiences for beginners? The answer to the question will be found in numerous

descriptions of modern school programs for the primary grades (2 3, 6 10, 12 16) These features may be summarized as follows

- 1 School experiences start with the child's own questions observations language and daily activities
- 2 Book work is delayed until books can serve a functional purpose
- 3 The program is not set up in advance but evolves as the teacher and children become acquainted with one another
- 4 The curriculum is broad and permits much exploration It arouses the child's curiosity stimulates his questions and leads him to experiment
- 5 The classroom is furnished as an attractive workshop and play center
- 6 School activities are carried beyond the walls of the classroom Experiences are shared with other classes in the school
- 7 A wide range of actual experience is provided so that many avenues to learning become available Children meet new concepts or practice new skills in many different situations
- 8 The activities that children carry on at the same time within the group are diversified There are small group projects as well as individual work
- 9 The school and home are linked in their task of child training

In planning activities for beginners the teacher must continually ask herself Is it natural? Is it healthful? Will this program further the child's development in wholesome ways?

Children of this age need a chance to explore to construct to mimic and to dramatize They have ideas to express in paint crayon clay cloth paper or wood They are growing in the ability to converse socially and to relate incidents from daily life They enjoy hearing stories and poetry read to them by the teacher

The children build their play around things they know and learn through dramatizing the life around them Rhythm and imitations of animal sounds and movements are enjoyed Six year-olds find joy in doing simple things They sing and dance play games compose little songs and look at pictures Play with blocks gives outlets for invention and imagination

Instead of drilling on the three R's for long periods each day beginners should learn to work with materials to undertake and complete simple tasks to make plans and to follow directions

They may spend considerable time on such projects as managing a play store building a model house or barn or constructing with large blocks a train airplane, or ship large enough for several children to play in Firsthand experience may be gained as they work in a

small garden, plant seeds in window boxes, or learn about live animals which have been brought into the classroom. Rudimentary science experiments may be carried on. The whole class may take a trip around the school grounds or to some interesting place in the neighborhood, the post office, the fire house, a farm, the zoo, a radio broadcasting station, a railroad station, or a museum, depending upon the projects the class has undertaken. They may plan a party for their mothers or an outdoor picnic.

A foreign visitor, who looked in on one first grade class when the children were hard at work, threw up her hands as she exclaimed in surprise, "All the arts, all the arts!" She was observing the class at the beginning of the school day during the period reserved for free choice of activities. Some of the children were looking at picture books, others were working with sand, clay, paints, or crayons. Some were busy cutting and pasting, working with wood, playing house or store, building with blocks or working with puzzles and table games.

Another visitor was astonished as she observed a first grade working on a farm unit, for it was hard for her to believe that the class had built the "barn" themselves.

In a description of an experimental activity program in the first grade, Lulu Wright has shown how readily six-year-olds learn through experience (14).

The beginners described by Agnes De Lima (3) take short excursions about the neighborhood, relate to the group their home, school and outdoor experiences, work with various materials, enjoy building with blocks, have an opportunity for bench work, paint, perform simple scientific experiments, learn good health and eating habits during lunch and rest periods, develop good work habits and learn social adjustments.

Language is an essential skill for beginning school work. A large share of the readiness program must be devoted to helping children speak more freely and intelligibly. In the primary grades there is need for activities, experiences and materials that will require children to talk *more*, not *less*. What a contrast to a former day when little children were forbidden in school to communicate with others or to express their thoughts aloud!

Drawing is another activity which has value in building readiness for study. Drawing furnishes a motor outlet; it is a childish form of expression, the child's mode of writing and is in fact a good foundation for learning to write. Yet, before reaching school age, many

children have had little drawing experience, they scarcely know what it means to draw and seem reluctant to try when they are given paper and crayons

Beginning with the Children's Own Ideas

Learning through experiences in the first grade should originate in the child's own world of ideas

Freddie, a rural child came into school breathlessly on a bright spring morning exclaiming, 'Our old sheep had twin lambs last night!' Every child was interested. There were endless questions. "Where do the lambs live?" "What do they eat?" "What does 'twins' mean?" "Can they come to school soon?" "How many other sheep are there?" "Where did the baby lambs come from?" "How big are they?" "What color are they?" "Will Freddie's folks keep the lambs or sell them?" Here are enough questions to motivate learning for the whole term.

In another school the teacher might have said, "Be quiet, Freddie. You're disturbing our lesson. You can tell the children all about it after school." But Freddie's teacher saw in the boy's simple statement and the ensuing questions the beginning of a live project on farm animals, a wealth of learning more genuine than any to be gained from a textbook. In fact, this project would be too big to be confined within the covers of a single book, even if the children could read. The answers to the questions must be gleaned from many sources in a variety of ways.

A first grade class wanted to know whether the turtles in their terrarium would hibernate in summer as well as in winter. One child suggested that they send a letter to her uncle, an authority on turtles for an answer to the question. The teacher wrote the letter at the children's dictation and soon the answer was forthcoming, together with some helpful advice on caring for the turtles in summer.

It is entirely natural for young children to enjoy imaginary play. A rough box the child constructs himself may mean a *real* radio set to him. There is no reason to insist that everything children use or make should be real in the adult sense. Yet it may be that in some cases children are satisfied with imaginary play only because they have been deprived of the real experience. Whenever possible, it is best to supply the real thing in place of a substitute and teach the child to use it as, for example, actual money in a sale of popcorn balls or real tools and equipment for making things.

Classroom Arrangements for Experience Teaching

In the regimented classroom, where the teacher plans beforehand everything the children are to do and gives uniform instructions to be carried out, the children sit in straight rows facing the teacher, who stands in front, however, when the children work at problem solving through firsthand experience, a more flexible arrangement of chairs and work space is required. Simple workshop equipment and play materials will be needed. If sufficient materials cannot be purchased, a survey of the community may yield the desired materials or disclose persons who will make them.

There should be a book corner with attractive story books on a low table. Large charts and stories the children themselves have written and illustrated should hang on the wall.

There should be a clay work table large enough for several to gather around.

A sand table might hold the interest of another group.

There should be paints and crayons and easels, or, if no easels are available, oilcloth or large sheets of newspaper spread on the floor.

In another corner there should be room for playing with blocks.

Woodwork might entice those who want to construct boats or houses.

Another table might be available for those who delight in jigsaw puzzles.

There are sure to be several children who choose to play "house," "mother," or "store."

The Daily Schedule

To insure continuity in the day to day program and to avoid omitting any of the "essentials," the children should follow a daily schedule with divisions somewhat as follows, but there should not be rigid adherence to these divisions if there are good reasons to vary the schedule.

Work and play period— choosing time"

Plans and discussion by the entire group

Outdoor play

Music and rhythm

Rest

Lunch

Stories

Activity period

Getting ready to go home

A work and play period first thing in the morning during which children learn to select an activity and work at it, alone or with a small group, without demanding the teacher's constant attention or interfering with other children who are busy with their own projects, lays the foundation for self responsibility during the later school years. The activities may include block building, clay work, painting, looking at picture books, puzzle games playing house or store. Children in higher grades who have had this preparatory experience prove to be more capable of working alone or with small groups and taking care of materials.

Organized Experiences as a Background for Learning the Three R's

During all the time that beginners are learning through experiences, they are storing up impressions that should lead to mastery of the three R's. Whenever they converse, relate incidents, ask questions, explain things, dictate something for the teacher to write, make plans as a group, or carry a message to someone in the building, they are developing skill in language. There is considerable evidence that all the tool subjects are more effectively learned when practice becomes part of actual activities that have real purpose for the children (See Chapters 14 and 24.)

Reading.—The foundation for reading can be laid as the children learn to recognize the written symbols for their names and to identify articles in the room by reading labels made by the teacher. They can guess what messages on the bulletin board say. They can look over the daily program, if it is posted on the blackboard, to see what has been planned to do next. They may see on the blackboard, for instance, the letter they dictated to the teacher to send to the science expert asking for advice about their turtles.

Instead of beginning to "teach reading," the teacher, using manuscript writing, should jot down titles, names and brief messages in the children's own words on their drawings, on charts or on the blackboards. The children can readily identify these scripts as meaning what the teacher says they mean. The associative process functions automatically. Nothing need be said about reading, but without conscious effort the child begins to learn to recognize many word symbols through observing what the teacher says she has written.

Since the content for reading, writing, language and spelling should all come from the same central experiences (e.g., Freddie's new lambs), all these learning activities can reinforce one another, econ-

strate readiness to advance to the next highest level. This plan provides for the wide range in age and ability among school entrants, and furnishes an adjustment period for the less mature children while not holding back those who are ready to move ahead. Since the customary grade designations are not used, premature judgments of children's success is avoided. No child experiences failure, and each one progresses steadily according to his abilities. Parents are pleased with the arrangement, according to Martha Alexander, Director of Elementary Education in Tampa, Florida, where junior primary groups have been established for some time.

Readiness of Parents

Although the school may develop a sound child development curriculum for the first grade, the program may fail unless parents understand why learning through organized experience is better for beginners than formal drill in separate school subjects.

Parents may express doubt and surprise about a first grade program in which children build with blocks, exercise on a jungle gym, have contacts with live animals, and learn to read from charts they help the teacher prepare. These parents need to know why some of the practices that prevailed when they went to school are now outmoded and why activity methods are considered the better way with beginners. This understanding can best be gained by actually observing the children at work in this type of program.

Room meetings to which all the parents in the group are invited can serve to inform parents about the methods used and to answer their questions. A meeting held even before the term opens, if it can be arranged, is a wise procedure. Invitations by the teacher to individual conferences should soon be accepted as a matter of course. Parents should be made to feel welcome in the child's classroom.

More extensive suggestions for building cordial relations between parents and teachers are given by Ethel Kavin (7). (See also the reference in Chapter 21.)

Parents need guidance as far in advance as possible of the time their children enter school. In one progressive community, children are enrolled for kindergarten at age two or three. Although they do not actually enter until kindergarten age, parents are encouraged to have frequent talks with kindergarten teachers and guidance workers in the school. The same provision is made for children who do not attend kindergarten but who have their initial school experience in the first grade.

QUESTIONS AND TOPICS FOR STUDY

1. Summarize the advantages for beginners of learning through experiences in a unified program.
2. How does learning through experiences in the first grade contribute to readiness for learning the skills? What other factors contribute to readiness?—
3. Outline a tentative curriculum and daily schedule for beginning first graders
4. List several topics that could be developed as activity units in the first grade
5. Describe the furnishings and arrangement of a modern first grade classroom
6. Why should not first grade children begin at once on an academic program devoted largely to the skill subjects?
7. When should children be taught to read and write?
8. What are the advantages in the experiential approach to learning the skills?
9. In what way is the use of manuscript writing in the first grade an advantage to teacher and pupils?
10. What use should be made of books in the first grade?
11. What advantages do you see in the junior primary class organization scheme?
12. Outline several topics that could be used in parent discussion groups to acquaint parents with the school program and the needs of beginners
13. Write five additional questions or suggested exercises based on the chapter

REFERENCES

1. Arthur Mary G. "A Study of the Achievement of Sixty Grade I Repeaters as Compared with That of Non repeaters of the Same Mental Age" *Journal of Experimental Education* 1936 5 203-205
2. Bain Winifred "Bridging the Gap between Kindergarten and First Grade" *Childhood Education* 1941 18 29-34
3. De Lima Agnes *The Little Red Schoolhouse* New York: The Macmillan Co. 1942
4. Harrison Martha L. *Reading Readness* Boston: Houghton Mifflin Co. 1939
5. Hildreth Gertrude H. *Learning the Three Rs* (2d ed.) Minneapolis: Educational Publishers 1946 Chapter 7
6. Hildreth Gertrude H. "Learning Through Experiences in First Grade." *Childhood Education* 1944 21 121 ff
7. Hildreth Gertrude H. ed. *Readiness for Learning* Bulletin. Washington: Association for Childhood Education 1941
8. Hubbard Elizabeth V. *Your Children at School How They Adjust and Develop* New York: John Day Co. Inc., 1942
9. Johnson William H. "The Prereading Program of the Chicago Public Schools." *Elementary School Journal* 1939 40 37-44

- 10 Lee Doris and Lameroux Lillian *Learning to Read Through Experiences* New York D Appleton Century Co Inc. 1943
- 11 Meriam Junius L 'An Activity Curriculum in a School for Mexican Children' *Journal of Experimental Education* 1933 1 304 308
- 12 Sherer Lorraine *Their First Years in School* Los Angeles Cal County Board of Education 1938
- 13 Stevens Marion *The Activities Curriculum in the Primary Grades* Boston D C Heath & Co 1931
- 14 Wright Lulu *A First Grade at Work* New York Bureau of Publications Teachers College Columbia University 1932
- 15 *First Year in School* Elementary School Bulletin No 8 State of New Jersey Department of Public Instruction. Trenton N J the Department 1944
- 16 *Guiding Child Development in the Junior Primary* Tampa Fla Hillsborough County Board of Public Instruction 1947

Chapter 16

TOOLS AND RESOURCES FOR LEARNING

When not in school, children use an endless variety of equipment for their every day activities. The typical back yard where active boys and girls congregate is a sort of laboratory for informal experimentation. At school, however, the resources for learning have been so largely restricted to textbooks that children have been cut off from the full range of materials they should have.

The newer type of school program with its emphasis on unified projects and workshop methods calls for every resource for learning that our modern age has produced. Among these resources are work tools, materials for arts and crafts, pictures, charts, maps, films, radio equipment, phonograph records, musical instruments, scientific apparatus, a school library, and museum exhibits. The resources of the community can furnish additional instructional material to serve the broadened program.

Equipment and materials for unified teaching should be selected cooperatively by teachers, children, and community authorities. Children may share in purchasing supplementary equipment by raising necessary funds. Some proportion of the school budget should be reserved for the purchase of equipment and supplies by teachers and children as need arises (11).

The nature and use of materials for activity teaching in the elementary school have been described by Edwina Fallis (3). The State Department of Public Instruction of Virginia issues a bulletin on instructional materials for use in the public schools. A report by Alice Miel and others (8) contains many references to sources of pictures, recordings, and museum materials.

In the activity curriculum at *Speyer School* (13) the pupils depended less on reading textbooks for information, and more on using nonverbal materials. They learned through observing still and moving pictures, listening to phonograph recordings, studying models, constructing things, and expressing themselves through drawing, painting, or modeling.

The use of films, museum exhibits and the other newer instructional techniques has encouraged the traditional school to alter its

schedules and methods, for the content of the films and exhibits does not fit in well with the rigid time schedule of traditional subject teaching and textbook study.

Films and the radio have proved a boon to the rural school where suitable texts in sufficient quantity have not always been available and where exhibits and other educational resources of cities are lacking.

These newer instructional devices offer no magic key to teaching. They are merely tools that can contribute to the children's growth when they are intelligently used by teachers who understand their possibilities and limitations. It is also essential that every pupil who is to use these newer aids to learning be instructed in their proper care and use.

Tools, Instruments, Scientific Apparatus

Equipment for both elementary and high school pupils should include a work bench, vises, saws, hammers, planes, lumber, craft materials, easels, sewing machines, cooking equipment, and gardening tools.

Some equipment for science work should be provided: laboratory tables, exhibit cases, housing for small animals, and a bay window or alcove reserved for raising plants and animals. There should be connections for running water, outlets for gas and electricity, facilities for projecting slides and movies, and radio equipment (8, 14). Items such as magnets, prisms, magnifying glasses, dry cells, and blue print paper should be available. A typewriter belongs in every classroom.

Elaborate equipment, however, is not needed for science. There is educational value in having children bring or make their own equipment. Materials such as cans and containers that would otherwise be discarded as waste material may prove to have educational uses. Some of the world's great experiments were worked out with simple materials the inventor happened to have, material that would usually be considered scrap or junk. Rubber, it is said, was first processed in a tea cup; a falling apple gave Newton the idea from which he developed his statement of the law of gravitation; a steaming kettle suggested to Watt the principle of the steam engine.

Shops, laboratories, or studios should be organized as work centers in the school so that all the classes can share equipment. There should be centers for science, fine and industrial arts, cooking, music, photography, and other workshop activities.

Pictures and Graphic Materials

According to an old proverb, "One picture is worth a thousand words." Today there is a trend toward the wider use of visual materials to supplement the study of books. Visual aids include motion pictures, photographs, stereographs, lantern slides, graphs, charts, posters, paintings, statues, and models.

Motion Pictures.—The importance of films in education can hardly be overestimated. Most people are primarily visually minded and retain visual impressions more readily than any others. Furthermore, children usually establish quite early in their lives a strong favorable association with movies, a fact which is a strong point in favor of films as an instructional device. Certainly the movie comes nearer than the textbook to presenting things vividly and concretely.

Consider the educational force of the "Popeye" movies and animated cartoons that have probably half the children of the country eating spinach and flexing their muscles. The use of documentary and instructional films in school, though not planned as entertainment, can be a real source of pleasure to children. Furthermore, because of the screen's emotional appeal, film lessons can be highly stimulating.

Films can make textbook lessons more meaningful. There is no field in the curriculum that cannot be supplemented advantageously through the use of films.

Movies can economize instruction. Aspects of nature study through the year can be observed in a few minutes (e.g., the yearly cycle of the frog, deer, or robin). Films have advantages over actual trips (e.g., to a farm) for activities can be shown in logical sequence, and in ten minutes a child can see what would otherwise require hours of time. Industrial processes can be demonstrated in whole or part, and the most complex operations can be made clear and simple by slow motion pictures or animated drawings. Talking films showing how to operate a lathe can save instructional time and equipment and still make a more vivid and lasting impression than a similar amount of time spent lecturing to students or requiring them to study printed directions. Children can learn much about such a topic as puppet making by seeing a film. If circumstances prevent an actual visit to a scene which would furnish background for school studies, moving pictures or colored picture slides can be substituted.

Two young boys preparing to clip their dog for the first time said they wished they could see a film showing the best methods, for then they would not make mistakes and would get through faster.

Educational films can be obtained which present content and clarify meanings in social studies, science, health, arithmetic, and such aspects of social living as making introductions. A new departure in publishing is the correlation of films with books so that pupils can view a film which illustrates the text they are studying.

The film library takes its place with books, museum materials, and pictures as essential equipment for modern schools. Teachers must be constantly on the lookout for moving picture features that can contribute background to class studies, not only instructional films especially prepared for children, but current commercial film showings in which children are interested. At school there is a place both for instructional films supplementing topics being studied and for recreational films shown primarily for entertainment.

The best films for children are those prepared expressly for them. Pictures in story or semi-story form are better than factual films. Those chosen should be simple, dramatic, interesting, and appealing to children. Twenty-five minutes is a long enough showing for primary children, forty-five minutes for the upper grades.

The films shown in one elementary school during two weeks were as follows:

- Kindergarten: "An Airplane Trip"
First Grade: "Shep, the Farm Dog" and "The Farm"
Second Grade: "Cane Sugar," in connection with a study of foods, and "The River," a science film
Fifth Grade: "The Pilgrims" and "The Development of Transportation"
Sixth Grade: "Native Arts of Old Mexico" and "The Panama Canal"
Grades Three to Six (in school assembly): "History of Aviation" and several nature study films.

During another week the following films were shown:

- First Grade: "Robin Redbreast" and "The Thrushes"
Third Grade: "The Autogiro"
Sixth Grade: "Chile" and "Peru."

These films were shown as part of classroom projects after preliminary study, reading, and discussion had prepared the children for seeing them. The film programs were followed by additional study and student reports in class.

The showing of instructional films should be part of a coordinated plan for studying selected topics.

Some schools exhibit educational movies at a regularly scheduled time, perhaps once a week. This is a treat the children can always anticipate, barring some unusual circumstance

There are many questions of classroom technique involved in the use of films

Should there be preparation before the showing of the film or only discussion afterwards?

Should before and after tests be given?

Should classroom discussion follow immediately?

Should the teacher do most of the talking or should the children participate?

Should discussion be oral or written?

Preparatory and follow up techniques to be used in conjunction with films include questions and answers, discussions demonstrations and supplementary work with museum collections

A bulletin published by the Encyclopaedia Britannica Company, Chicago, makes the following suggestions in connection with school film showings ¹

Be sure that the purposes in viewing the film are well established in the minds of every pupil. These purposes may grow out of pupil discussion during the progress of a unit or may be suggested by the teacher who has seen the film. The teacher should be well acquainted with the content of the film before it is shown.

The film can be shown advantageously several times during the course of a unit.

Immediately after the showing, have a discussion in which three things are accomplished

Determine the extent to which the objectives in showing the film have been accomplished

The teacher notes questions and comments by pupils as a basis for further showing of the film

Use the interest in the film as the basis for a broader study of the film. This will lead into many types of research and creative thinking oral and written language art dramatics, and other activities associated with the unit

Experiments are under way in the use of the animated talking cartoon for teaching reading foreign languages health, geography, science, and even vocational subjects. The possibilities appear to be far reaching. A campaign has been started in Mexico and South

¹ Quoted by permission of Dr V. C. Arnsperger executive vice president of Encyclopaedia Britannica Films

America to reduce illiteracy through the use of animated cartoons featuring familiar Walt Disney characters with which the public is already acquainted. Reading, language, and health are to be taught through this medium.

References 36-50 include materials on the use of films in school instruction and catalogs of available films.

Pictures and Slides.—Talks illustrated with lantern slides or similar types of projected pictures are a useful instructional device, if the lecturer is accustomed to talking to children and prepared to answer their questions. One type of lantern slide displays the original material directly, eliminating the need of reproducing it on glass slides. A horizontal type of projector enables the exhibitor to point out details on the slides as the pictures or diagrams are flashed on the screen. Another device, the hand stereoscope, affords entertainment and instruction to countless youngsters just as it did in their grandparents' day. Stereoscope slides have proven their value as part of the activity program.

Maps.—The map has been recognized as a much neglected visual aid which has far more possibilities for education than have yet been realized. Maps and globes belong in every classroom, including the kindergarten. Relief maps, illuminated maps, globes and outline charts as well as the usual colored Mercator projection wall maps, deserve a larger place in teaching. More details on the map as an instructional device are given in Chapter 9.

Instruction Via Radio

The radio has been called the "fourth R" in education. This invention is causing a revolution in our customs and culture. By its means, voices travel around the world in a fraction of a second. Few modern inventions have such magical power. The President of the nation can sit in his study and talk to millions of people around the world.

Children nowadays learn much from listening to the radio, they brush their teeth, eat breakfast cereals, put savings in the bank, learn social studies and geography—all at a broadcaster's suggestion. Parents and school teachers seem to shrink in importance. One well informed twelve-year-old replied, when asked how he knew so much about current events, that he listened to the radio news programs during his spare time at home. Other children get a liberal musical education from the radio. Radio presentation carries so much pres-

tige and many programs are presented in such a pleasant way that children naturally succumb to the enchantment

A recent survey showed that school children get their information more frequently from the radio than by any other means. According to Arthur Jersild (24), school age children listen to the radio on an average of two hours a day. Although radio listening does not make reading any less important it somehow fills a place in children's lives that reading does not hold. One child wrote to a broadcaster, "I have lots of trouble with my reading but I can understand your broadcast all right." The spoken word conveys more stimulation to many persons than the printed page.

School Use of the Radio—Although there has been a lag between developments in radio as a medium of amusement and dissemination of information on the one hand and the school's use of radio as an educational device on the other, classroom walls are now rapidly expanding as broadcasting facilities play a larger part each year in school instruction.

In communities where earnest teachers have labored long to bring *some culture, happiness, and beauty into the lives of youngsters* this objective can now be more readily achieved at the turn of the dial.

Public schools throughout the country are making the radio an integral part of school life. One great advantage of radio in school instruction is its timeliness. The pupils hear the voice of authority relaying up-to-the-minute news or discussing current topics. The news programs are popular in both elementary and high school. In some communities special educational broadcasts are prepared under school auspices for city wide use in the social studies, music, literature, foreign languages, and other subjects. One western city conducts a quiz program for high school students. Grade school children listen to music, book reviews, stories and dramatizations broadcast over local stations. Instead of displacing reading, the radio tends to vitalize children's experiences so that the reading they do becomes *more meaningful to them*.

The radio station of the Cleveland, Ohio public schools is on the air eight hours each day, presenting programs ranging from kindergarten stories to workshop programs for secondary school students. There is cooperation with local commercial stations which permits transmission of some programs from the major radio networks. The programs for the elementary grades are prepared and tried out in the experimental laboratory schools of the city. Such programs include material related to art, health, music, safety education, science, social

studies, current events, dramatics, arithmetic, and foreign languages. Contributions are made by authorities in various fields. Special programs are broadcast for observance of holidays, drives, and other local events.

The Radio Voice of the Chicago Public Schools is operated each school day from 10:30 A.M. to 3:00 P.M. Each week the Radio Council operating the station publishes a useful bulletin which is sent to the schools. Among the programs broadcast by this station have been "Places and People," broadcast from the Chicago Natural History Museum; "Your Science Story Teller," a series of programs for upper elementary grade science study; "Let's Tell a Story," a program designed to acquaint children with good books and stimulate interest in reading; "Mother Goose Lady," a series of stories for the primary grades; "Home in Illinois," the story of Illinois told through the development of the state parks.

The chief limitation of movies or radio programs for school instruction is that without effective guidance these resources may be used chiefly for amusement and entertainment quite unrelated to school projects. In utilizing the radio, just as in the case of moving pictures, there needs to be "before" and "after" discussion tied to the class work, not merely indiscriminate listening to broadcasts.

Television.—Now in addition to radio, we have video. Television is too new to evaluate as a teaching device, but it seems to hold almost unlimited possibilities as an aid to classroom instruction. Through television the world of affairs may be brought vividly into the classroom and one lesson or demonstration may be observed simultaneously by thousands of students. Television may solve the problem of supplying learning opportunities for all the children in remote areas. Its use will save the expense that making educational moving pictures entails. As one educator pointed out recently, when the army wanted to demonstrate the use of a new rifle, it took two weeks of fast production to prepare a suitable film. With television, the demonstration could have been given almost at once.

Phonograph Records

Recordings have a place in all phases of the educational program, including the study of poetry, music, language, social studies, and science. There have been conflicting reports concerning the value of recordings in instruction compared with reading or listening to a lecturer, the differences in results of experiments being due chiefly to the way the recordings were used in teaching (28).

To make the educational features of recordings available to more classrooms, studios are preparing a library of phonograph records to be put into country wide circulation on a loan basis so that instructors can select what they need at the time they need it. The plan is to establish central libraries of records in key cities. Newark New Jersey, has an outstanding record lending library from which the local schools may borrow phonograph records for their programs. A record catalog for educators listing hundreds of items is prepared by the American Council on Education and published by New York University (See references 18, 26, 27, 30 31, 34)

The Wider Use of Books

Books in the hands of the common people have exerted the greatest educational force in all history. No other medium has stimulated imagination and creative ability to such an extent. The greater part of modern science, in fact, has followed in the train of the printing press.

A continuing aim of education is to acquaint children with the untold wealth that lies in books. Although in recent years reading has suffered some competition from radio and moving pictures reading remains the basic study technique and books are still the chief source of information above the primary grades. In one school, the children said they would even be willing to give up the radio if they could have more good books to read.

Formerly lesson learning at school meant chiefly studying a basic text in each content subject. The same book was used by the entire class. Study consisted largely of reading and memorizing factual statements preparatory to answering questions on the text.

The trend toward the richer educational program represented in unified teaching has caused the decline of the single uniform text for content studies in favor of a broad reading program in which pupils, under the teacher's guidance, seek reading materials that apply to the problems being studied. Instead of a single text multiple texts containing material on the topic under investigation are used. Textbook study is supplemented by library reference materials which include children's encyclopaedias, 'trade' or popular books, periodicals, indexes and bibliographies.

The popular picture magazines are found to be useful teaching aids. The bulletin board newspaper composed of clippings brought in by the children is another. Mimeographed materials, directions, and plans that the teacher and children prepare may extend the char-

acter and range of reading material. In shifting from subject teaching to unified studies, teachers say that they use the typewriter and duplicating equipment as never before for preparing current reading material. Pupils are trained to use all these nontraditional study materials.

Not only does contemporary education make wider use of books than ever before, but modern schools also acquaint their pupils with the newspaper, one of the most powerful instruments for disseminating knowledge and influencing public opinion. Current newspapers and periodicals are used by pupils for research on many topics.

Since source material relating to local enterprises is seldom available in forms suitable for children to read, an important step in preparing for unit teaching is the compilation of study type materials based on local sources.

Formerly, "trade" books had little place in schoolwork. With the trend toward unified teaching, interesting story books have a central place as instructional materials in curriculum units. In fact, a particular book discovered by some child may lead to the theme for a project. A collection of story books will enrich the teaching of such themes as the westward movement in American history, animals, ancient man, or aviation.

Examples of reading sources used with various curriculum units will be found in several references (13, 57, 69, 72).

The School Library

The library becomes the hub of the school operating on the unified plan, for it is equipped and arranged to enrich all aspects of class work. A well equipped library provides a service center for the entire school, making possible study resources for a variety of topics.

A homelike atmosphere should be created in the library. In addition to shelves and a catalog case, equipment should include bulletin boards, comfortable chairs, exhibit cases, colorful posters, pictures and other decorative features.

Unfortunately, many schools are still without central library facilities. A recent study showed that 3,000 elementary schools of one state had no library books and that only 600 elementary schools in the state had as many as 200 books. The situation in the high schools was somewhat better. The chief problem appeared to be lack of funds. In many schools there were no books other than required textbooks.

With a central school library, children can begin reference work in the primary grades. It should grow directly out of their activities

and work on curriculum units. It may even outgrow the school library and demand the larger library resources of the community. The librarian and teacher together should plan how the library resources are to be used. In working on the unit the librarian should meet with the teacher and the entire class in order to assure the most complete cooperation.

The school library should not be restricted to informational and reference materials. In addition, for recreational reading, there should be story books in attractive covers, graded in terms of reading difficulty and content.

The school library should contain far more than bound books. How happy the children were in one school when they found they could borrow stereoscopes from the library and view the scenes of Switzerland about which they had been reading! Even phonograph records with music appropriate to the unit were to be found in this library.

The bulletin board maintained by the pupils may accumulate clippings under such headings as aviation, camping, circus days, hobbies, Indians, jungle tales, pirates, or ships.

An advantage of the central school library is that it brings all materials together so that all grades are represented and gives a child the opportunity to choose whatever suits him, not solely books that are restricted to his grade. Ideally, the elementary and high school libraries should overlap, because there will be elementary school children whose reading needs can be satisfied only by high school level material and high school boys and girls who need material on an elementary level. There are times when high school boys and girls want to examine books written for younger children, and they enjoy rereading books they used in the lower grades.

The children themselves can help select books for the school library by reviewing books recommended for purchase and then voting for their favorites to be added to the permanent collection.

The traveling library serves many country districts not otherwise provided with library facilities, and city public libraries enrich school reading with their treasures.

The State Department of Public Instruction of Virginia has issued a library manual for the public schools. (References 51-72 describe library facilities for schools.)

The Expanding Classroom

Classroom walls are expanding as education reaches out into the community and the larger world through excursions taken by the

class to points of interest that have a bearing on school studies. It is shortsighted to argue that children must be in school classrooms all the time in order to learn anything of importance. Since the new school is planned not only to impart knowledge and train in skills but also to acquaint children with their environment and to furnish a broad background for school studies, the community should become the school's work shop.

A teacher in a small town relates that one morning two children rushed in breathlessly to tell her about the big ant hills they had discovered on the way to school. They begged for the whole class to come to see the phenomenon. Although the teacher felt that she could not give this permission because of strict rules that governed absence from the classroom, she regretted having to refuse, for she felt certain that an educational opportunity was irretrievably lost. In contrast to this attitude, another school arranged bicycle excursions for the older children working on long unit studies of trees and insects, and allowed the younger children to take short excursions for similar purposes on foot. Such trips both reveal and arouse new interests.

"Milk comes from bottles," asserts the city-bred first grader who has had limited contact with nature. Actual contact with natural phenomena is certain to correct such erroneous impressions.

The Excursion, Study Trip, or Tour.—Investigations of the value of excursions by Ella Clark and others (78) show that a great variety of interests is aroused in the children who take excursions and that they pursue many widely differing activities.

John R. Shannon (80) has compared the amount of learning achieved by four history classes, two of which supplemented their studying with trips, and two by the usual classroom methods. The conclusion reached was that the combination of classwork and trips to the site being studied proved superior to either method alone.

Among the advantages that result from educational trips are the vividness of personal experience ("being on the ground"), the opportunity to visualize action more effectively by being able to place it in its actual setting, and the opportunity to learn about things (historical, social, or industrial) that are peculiar to or characteristic of the local scene and not available in textbooks.

Since communities differ widely, the points of excursion interest will be equally various. While it would be impossible to visit a Revolutionary battlefield from a western town, there may be nearby a defunct gold mine dating back to the "gold rush" days. One commu-

nity may be rich in Indian lore, in another the local glass works may be the outstanding feature of educational value

Better transportation facilities now make it possible for school groups to take trips or excursions as often as every week in good weather in order to study features of community life. These projects fit in with unified teaching and learning by providing direct experiences in a situation that provokes questions, arouses interest, excites curiosity, and poses problems. What an experience it was for one city child to see three teams of horses pulling a heavy harvest load! These excursions are not looked upon as extra privileges to be sandwiched in "if there is time" and if funds can be raised but as part of the regular school work. In this way the school curriculum becomes truly environment centered.

Trips as educational experiences appear to have begun about 1913 at the City and Country School, New York, to meet the needs of city children who lacked the means of getting acquainted with country life and nature. In New York City in 1937-1938, according to the report of the Superintendent of Schools, 719,513 public school children went on trips using free public transportation. One experimental school reports that during the year many trips were taken to places of interest in the city, including a police station, the City Hall, a bakery, a newspaper office, the railroad station, the library, a refrigerating plant, a fruit auction, an ice cream factory, and the zoo. The choice of destination for each trip depends on the maturity and projects of the children.

Primary children in New York City take a trip to the Natural History Museum in the company of a science expert. Fourth grades go to the Planetarium for facts needed in an astronomy unit. Sometimes, instead of the entire class, a representative group makes the trip.

In New York City, the Bronx Zoo arranges a schedule designed to fit the educational needs of children, who are taken "behind the scenes" to gain more information about the habits of animals from experts in charge.

The chief problem involved in using the excursion as an educational device is that of keeping trips on an educational rather than a sightseeing level. The values derived from trips depend in part on the preparatory and follow up work done. Preliminary planning contributes to the success of any school excursion. The teacher, or possibly a parent, makes a preliminary visit to explore the possibilities before the trip is arranged. Preparing for the actual trip can be as valuable a learning experience for the children as the trip itself.

A primary teacher relates the following experience in arranging a springtime excursion for the second grade

After Easter, during our conversation period the children were discussing their experiences. One little girl had been given a white bunny. She invited the children and me to come and see the bunny. We talked about the trip and planned to notice all the signs of spring. Before we left Dora's house her mother served popcorn. When we returned to school I wrote on the board all the things the children said that they had seen. The next day we made a story about our excursion. The children drew pictures and cut them out to paste in our book alongside the corresponding sentences. I *manuscripted* the sentences on 12 x 18 oak tag sheets so that we had a large book. We learned stories, poems and songs about bunnies. The book was placed on the reading table in the classroom and was shared with the first grade.

An older group took a trip to a bakery. The teacher pupil planning included making arrangements for transportation. At the bakery the children asked questions of the workers, recorded answers and listened carefully to all information they were given. Following the trip, after dividing into small groups for each main topic, they prepared a group report of the visit. The story of the trip was presented as an assembly program. The written report and the printed materials collected were filed in the school library for reference.

The Curriculum Division of the Long Beach (California) City Schools has prepared a catalog of available local excursions, including cost, distance, time, location, what can be seen, and major values to be derived from the experience. This example should be more generally followed in city schools, for it saves the time of teachers who *plan units involving excursions*.

Adolescents need more mental stimulation than sporadic trips to the local art museums or the city library afford. They need to meet people of different types, to see people at work in many occupations, to investigate housing, to study the courts and welfare agencies, and to gain firsthand knowledge of many other phases of life in their community.

In the more progressive schools, the educational excursion has become an established feature of high school education. A ninth grade class may visit a factory to make its study of science more realistic. Selected students from one school may join those from other schools for a trip to an industrial center, for a farm study, or for a visit to the nation's capital. Groups may spend a weekend on work projects at a neighboring agricultural school. Students usually rate these

trips high on the list of the school's activities because they furnish opportunity for realistic learning

Community Resources

Nonschool agencies and resources for teaching children are to be found in every community (See Chapter 19) The tendency in modern teaching is to utilize these resources for a great variety of school projects

In some cases, community source materials can be brought into the school in others, the children and their teacher go into the community to become better acquainted with the local bank or post office, to see a farm in operation, or to learn how a modern factory operates

Local source materials, such as clay from the river bank for use in modeling or the life in a nearby field or stream as a basis for nature study, may often be easily obtained or used in rural schools Many things that people keep stored in their attics, such as costumes, figurines, and antique objects, can be used in school enterprises

For the fullest utilization of community resources it is well for teachers to inquire

What services do local museums offer?

What commercial firms have exhibit material for free distribution?

What economical transportation facilities are available?

What community agencies are there and what services does each offer that may be helpful to teachers?

Which parents have particular talents that would contribute to school projects?

What persons are familiar with the community's history, legends, and development?

What persons have interesting collections that might be exhibited or described in connection with school projects?

What community campaigns and enterprises are there to which children might contribute, or in which they might participate?

Demonstration Materials

The teaching method that educators praise most highly is one that uses illustrations, demonstrations and examples

In one school, the upper elementary and junior high school grades attended an assembly at which a parent, who was a science teacher, exhibited an electric eel and at which several children told about their trip to the aquarium and the zoo Another group was given a demonstration with models of erosion, of the action of water on soils

and rock Simple laboratory experiments invariably prove instructive and interesting even to children in the lowest grades

In New York City, the delivery truck of the Education Department of the American Museum of Natural History will deliver to the schools on a loan basis various materials requested for use in teaching projects

Exhibits

There are few communities that do not have educationally worthwhile exhibits of some kind, at least at certain times during the year Larger schools can establish their own small museums, adding to the collections year by year For these exhibits children should make their own collections of mounted pictures and specimens

A committee composed of children and faculty members can arrange exhibits of interest to the whole school These exhibits may be collected by a parent, by a single child, by an entire class, or even by the whole school

Museum Exhibits.—Nearly every large city has museum exhibits which have educational value for school children Usually the museums arrange special exhibits for children and present educational programs throughout the year The American Museum of Natural History, New York, provides the unusual feature of moving pictures demonstrating the use of specimens, articles or costumes to supplement the exhibits The moving pictures enable the children to get a clear idea of the way in which ancient implements and materials were used

The Children's Museum.—Children's museums established in the larger cities have demonstrated the value for all age groups of learning through experiences A young boy, who belonged to a club sponsored by such a museum, showed his enthusiasm by replying, when asked how long it took him to walk from school to the museum, "I don't walk, I run"

In these museums are found diaramas showing in lifelike scenes the evolution of life and of human progress on this continent, displays of plant and animal life, magazines, documents, original specimens of all sorts, and pictures In addition to fossil remains, there are 'live' exhibits such as a butterfly emerging from a cocoon, a porcupine, toads or snakes The exhibits are supplemented by conferences, motion pictures, illustrated talks, and demonstrations

School and museum authorities collaborate in arranging exhibits that fit school curriculums. The museums usually lend lantern slides, films, picture collections, and phonograph records to schools, and often send traveling exhibits to rural areas.

In one southern city, the children's museum sponsors Saturday nature excursions. The children assemble at the museum with their butterfly nets, geologist's hammers, and bags for snakes and frogs before setting out to explore the surrounding region.

(References 73-76 give further details concerning museum exhibits for school children.)

The Central Bureau for Supplementary Teaching Materials

The schools of Greenville County, South Carolina, have established a cooperative materials bureau which developed from collections of pictures, pamphlets, and books donated by parents, teachers, and pupils in order to supplement the usual school equipment. According to the bureau's 1942 report, it had grown to such an extent that its collections included 15,000 primary readers, 7,000 other books, 9,000 pamphlets and bulletins, 1,500 mounted pictures, more than 1,000 wall posters and charts, 1,100 slides, 1,000 stereographs, 400 phonograph records, and more than 400 reports on different unit projects (every year each teacher using the service writes a report on her most successful unit and deposits it with the bureau). Films are available, but must be rented. The bureau also furnishes a motorized distribution system to deliver and collect the materials for the schools.

If materials are distributed from such a central bureau, a strain may be placed upon the resources unless arrangements are made to use the more popular units on a definite schedule so that the materials can be rotated among the classes seeking their use.

Teacher Training in the Use of Instructional Aids

Teaching from a single textbook is a simple matter compared with lesson planning and classroom instruction that involve the use of films, radio, television, and exhibit materials. The handling of technical apparatus calls for certain skills which teachers without special training may not possess. Instructing teachers in the use of moving picture equipment and the techniques of making films, preparing slides and making recordings has become a new responsibility of the teachers colleges and in-service training programs, for it is essential that teachers and their student assistants know how to use this expensive equipment properly.

QUESTIONS AND TOPICS FOR STUDY

- 1 Describe the materials and equipment that should be available for the unified program in the first grade the middle elementary grades, the upper elementary grades, the junior high school
- 2 Choose a unit suitable for the primary grades, upper elementary grades or high school and show how you would enrich the teaching of this unit with new instructional techniques
- 3 What are the advantages of using visual aids in learning at school?
- 4 What steps should be taken to insure that genuine learning results from film showings in school? Radio programs used in school instruction? Recordings used as an instructional device?
- 5 Describe the place of the library in the modern school
- 6 Is it better to have a central school library classroom libraries, or both?
- 7 How should a central school library be equipped?
- 8 Indicate the ways in which the classroom teacher and the school librarian can cooperate in developing curriculum units
- 9 What precautions should be taken when using the excursion as an instructional device?
- 10 How can local museums contribute to teaching? What are the advantages in setting up a school museum? What steps should be taken to insure successful results from the use of the museum as an instructional aid?
- 11 Write five additional questions based on the chapter

REFERENCES

GENERAL

- 1 De Lima Agnes *The Little Red Schoolhouse* New York The Macmillan Co 1942
- 2 Dent Ellsworth C *The Audio-visual Handbook* 4th ed Chicago Society for Visual Education 1942
- 3 Gallis Edwina *The Child and Things* Yonkers N Y World Book Co 1940
- 4 Hanna Paul *The Role of Education in Utilizing Regional Resources* A preliminary report New York Progressive Education Association 1939 (Mimeographed)
- 5 Kinder James S *Visual Aids in Education* *Review of Educational Research* 1942 12 No 3 Chapter 8
- 6 Lee J Murray and Lee Doris *The Child and His Curriculum* New York D Appleton Century Co Inc 1946 Chapter 8.
- 7 McKown Harry C and Roberts Alvin B *Audio visual Aids to Education* New York McGraw Hill Book Co Inc 1940
- 8 Miel Alice and others 'New Tools for Learning' *Childhood Education*, 1944 21 126 131
- 9 Wittich Walter S and Fowlkes John G *Audio visual Paths to Learning* New York Harper & Bros 1946
- 10 *The Community as a Source of Materials of Instruction* (rev ed) Georgia State Department of Education Atlanta Georgia 1938

- 11 *Course of Study for Virginia Elementary Schools* Grades I-VII Richmond State Department of Public Instruction, 1943
- 12 *Expanding the Classroom* Department of Public Instruction, Pennsylvania. Harrisburg Pa the Department 1938
- 13 *Final Report of the Speyer School* New York City Board of Education 1942.
- 14 *Lincoln School Staff A School for the World of Tomorrow* New York Teachers College Bureau of Publications 1939
- 15 *What Education Our Money Buys* Educational Conference Board of New York State. Albany N Y The Board 1943

RADIO AND RECORDINGS

16. Atkinson Carroll *Education by Radio in American Schools* Contributions to Education No 207 Nashville Tenn. George Peabody College for Teachers 1938.
- 17 Atkinson Carroll *Public School Broadcasting to the Classroom* Boston Meador Publishing Co 1942.
18. Bathurst Effie G *The Phonograph as an Aid to Learning in Rural Elementary Schools A Handbook for Teachers and Supervisors* Albany University of the State of New York State Education Department, 1943
- 19 Bathurst Effie G *Phonograph Records as an Aid to Learning* *Journal of Educational Psychology* 1943 34 385-406.
- 20 Berry, Lola *Radio Development in a Small City School System* Boston Meador Publishing Co 1943
- 21 Cooper, Isabella M *Bibliography on Educational Broadcasting* Chicago University of Chicago 1942
- 22 Fulank Henry L *Radio in the Classroom* Madison University of Wisconsin Press 1942
- 23 Harrison Margaret. *Radio in the Classroom.* New York Prentice Hall Inc., 1937
- 24 Jersild, Arthur T *Radio and Motion Pictures* *Thirty Eighth Yearbook of the National Society for the Study of Education* Chicago University of Chicago 1939 pp 153 173
- 25 Levenson William *Teaching Through Radio* New York Rinehart & Co Inc. 1945
- 26 Miles John R *Recordings for School Use* A catalog Yonkers N Y World Book Co 1942
- 27 Reid Seetley and Day D *Radio and Records in Education.* *Review of Educational Research* 1942 12 No 3 Chapter 6
- 28 Rulon Philip J and others "A Comparison of Phonographic Recordings and Printed Materials" *Harvard Educational Review* 13 1943 63 76 163 175 246-255
- 29 Woelfel Norman and Tyler I Kieth, eds *Radio and the School* Yonkers N Y World Book Co. 1945
- 30 *Catalog of Selected Educational Recordings* New York University New York The University 1944
- 31 *Phonograph Record Library* Bulletin No 83 Curriculum Laboratory, Division of Surveys and Field Studies Nashville Tenn George Peabody College 1943.
32. *Radio in the Classroom* Experimental Studies in the Production and Classroom Use of Lessons Broadcast by Radio. Madison Wisc. The University of Wisconsin Press 1942.
- 33 *Radio and the Classroom* Department of Elementary School Principals Yearbook. Washington National Education Association 1940-1941

- 34 R.C.A. Victor Audio-Visual Service. Educational Department. R.C.A. Manufacturing Department, Camden, N J
- 35 *Teacher's Manual and Classroom Guide* Columbia Broadcasting System, New York
- Parents Magazine* has a section each month entitled "Records Children Like"

FILMS AND OTHER PICTURE MATERIALS

- 36 Bathurst Effie. *Conservation Films in Elementary Schools* Bulletin No 4, Washington U S Office of Education, 1941
- 37 Cook Dorothy and Rahbek Smith, Eva. *Educational Film Guide* New York H W Wilson Co, 1946
38. Corey, Stephen M 'Teacher Evaluation of Classroom Motion Pictures' *Elementary School Journal*, 1945, 45, 324-327 This article contains a classroom film evaluation form.
- 39 Dale Edgar, Dunn, Fannie W, Hoban Charles F and Schneider, Etta. *Motion Pictures in Education* New York The H W Wilson Co, 1937
- 40 Flynn, Helen and Corey, Stephen M 'Teaching Communication Through the Use of Sound Films' *School Review*, 1945, 53, 348-352.
- 41 Gray, H A *Instructional Sound Films Correlated with Public School Curriculum Materials* Erpi Classroom Films Inc., 1940
42. Hamilton, G E. *The Stereograph and Lantern Slides in Education* Meadville, Pa., Keystone View Co 1938
- 43 Hoban, Charles F *Focus on Learning Motion Pictures in the School* Washington American Council on Education 1942
- 44 May, Mark A 'The Psychology of Learning from Demonstration Films' *Journal of Educational Psychology*, 1946, 37, 1-12
- 45 Tower Hill School Staff *A School Uses Motion Pictures* Washington American Council on Education 1940, 4, No 3, Series 2
- 46 Warren, Curtis E. "Contribution of Films to a School Program." *California Journal of Secondary Education*, 1941, 16, 400-403
- 47 New York University Film Library *Annotated Catalog* 71 Washington Square, South, New York City
- 48 R.C.A. Victor Audio-Visual Service. Educational Department. R.C.A. Manufacturing Department, Camden New Jersey
- 49 Catalog of Films School List New York City Films Incorporated.
- 50 *Selected Educational Motion Pictures A Descriptive Encyclopedia* Washington American Council on Education, 1942
- The Encyclopaedia Britannica, Inc., Chicago, has an educational film lending service.

Educational Screen is a monthly publication devoted to audio-visual aids in education.

THE LIBRARY AND THE USE OF BOOKS

- 51 Aldrich, Grace L and Flemming Cecile W 'A Library in Action in a Modern School.' *Teachers College Record* 1937 38, 389-404
52. Belnap S Y 'The Library as a Reference Center' *Library Journal*, 1937, 62 344-345
- 53 Brown, Howard W *A Study of Methods and Practices in Supplying Library Service to Public Elementary Schools in the United States* Philadelphia University of Pennsylvania 1941
- 54 Butler, Helen L. "The Library in Education." *Review of Educational Research*, 1942 12, No 3 Chapter 7
- 55 California State Department of Education. *The Library in the Elementary School*, Bulletin No 18. Sacramento Calif The Department, 1935

- 56 Colburn Evangeline *Books and Library Reading for the Intermediate Grades* Chicago University of Chicago Press 1942
- 57 De Lima Agnes Baxter, Tompsie and Francis Thomas J *South of the Rio Grande* New York Bureau of Publications Teachers College Columbia University 1942
- 58 Fargo Lucille F *The Library in the School* Chicago The American Library Association 4th Rev 1947
- 59 Fenner Phyllis R *Our Library* New York John Day Co., Inc. 1942
- 60 Flexner Jennie M *Making Books Work A Guide to the Use of Libraries* New York Simon and Schuster, Inc., 1943 Chapters 6 and 7
- 61 Gardiner Jewel and Baisden Leo B *Administering Library Service in the Elementary School* Chicago American Library Association 1941
- 62 Grady Marion. 'The Central Library in the Elementary School' *Journal of the National Education Association* 1941
- 63 Hauptman L M 'Using Community Resources in Developing the School Library' *Journal of the National Education Association* 1940 29 205 ff
- 64 King William A *The Elementary School Library* New York Charles Scribner's Sons 1929
- 65 Munster Maud. *Practical School Library Organization and Integration* Altoona Pa the author 1941
- 66 Mott, Carolyn and Baisden Leo B *The Children's Book on How to Use Books and Libraries* New York Charles Scribner's Sons 1937
- 67 Walraven Margaret K. and Hall Quest Alfred L *Library Guidance for Teachers* New York John Wiley & Sons Inc. 1941
- 68 Williams Claude L and Richards Enid J 'The Elementary School Library as a Means of Individualizing Instruction' *Elementary English Review* 1940, 17, 221 229
- 69 Articles on the school library *Baltimore Bulletin of Education* March April 1939 Baltimore Public Schools
- 70 *Elementary School Libraries Twelfth Yearbook* National Elementary Principals Association Washington National Education Association 1943
- 71 'Integration and Library Instruction' *American Library Association Bulletin* 1936 30 August.
- 72 *School Activities and the Library* Chicago American Library Association 1942.

THE MUSEUM

- 73 Hart, William G 'The Low Cost School Museum' *Educational Screen* 1942, 21, 176 ff
- 74 Forbes, John R 'The Children's Museum' *Journal of the National Education Association* 1942 31 46-47
- 75 Palmer Lawrence ed. 'At School at the Zoo' *Nature Magazine* 1941 34 576
- 76 Powel Lydia *The Art Museum Comes to the School* New York Harper & Bros., 1944

THE EXCURSION

- 77 Atyeo Henry *The Excursion as a Teaching Technique* Contributions to Education No 761 New York Bureau of Publications Teachers College Columbia University 1939
- 78 Clark Ella C. 'An Experimental Evaluation of the School Excursion.' *Journal of Experimental Education* 1943 12 10 19

- 79 De Lima Agnes Baxter, Tompste and Francis, Thomas J *South of the Rio Grande* New York Bureau of Publications, Teachers College Columbia University 1942
- 80 Shannon John R "A Comparison of Site Recitals With More Conventional Methods of Teaching History" *Teachers College Journal (Indiana)*, 1941, 13 1 10
- 81 *Living and Learning in the Elementary Grades* An Intimate Study of the P K Yonge Laboratory School Gainesville Florida 1943
- 82 *The Principal and His Community* *Eleventh Yearbook, Department of Elementary School Principals* Washington National Education Association 1932 Chapter 10 Excursions and Exhibits pp 455-488
- 83 Tippet James S and others *Schools for a Growing Democracy* Boston Ginn & Co 1936
- 84 *The Utili ation of Community Resources Ninth Yearbook National Council of the Social Studies* Cambridge Mass The Council 1938

Chapter 17

LIFE IN THE SCHOOL

The transition from piecemeal learning to unified learning through a rich program of experiences has brought about a transformation in the life of the school. Since learning takes place through all the pupil's contacts and experiences during the day, the entire life of the school becomes the curriculum. The educative process is at work whenever there are problems to be solved and personal adjustments to be made.

Formerly, schools depended largely upon so called "extracurricular" activities to supply the living experiences that give meaning to theoretical instruction, but usually only a small number of pupils participated, and these activities were looked upon as something of a luxury to be enjoyed only after the regular school day was over. In schools that have adopted the unified program and workshop methods, former "extra" activities have become part of the curriculum for all.

The change from formal subject teaching to teaching through unified experiences by laboratory methods has resulted in changes in school architecture, furnishings, and equipment. The old type building, lacking workshops and sufficient elbow room, with space allotted strictly according to the number of children to be "seated," no longer gives adequate housing for the new program.

When the change is made from conventional teaching to the unified program and workshop methods, it is natural that teachers should have many questions concerning class management, pupil participation, school government, discipline, group work, and the like. In the sections that follow, various features of life in the modern school will be described and an attempt will be made to answer questions most frequently raised.

Joyfully to School

Is going to school a happy experience for the child, or does he find school dull and lifeless? A child's attitude is influenced by his physical surroundings and by the atmosphere that prevails in the

school His tastes for the good and the beautiful may be formed there for all time

The dreary aspect of many schools has a stultifying effect on children Newer schools have more of the cheerful and informal appearance found in cultured homes Elizabeth Irwin described the school in New York City of which she was principal as having a gay, robust tone and an easygoing, relaxed atmosphere Laughter was common among teachers parents, and children The children were cheerful in the midst of their work, and they lived energetically in the congenial school atmosphere

Another fortunate school is described as having colored walls, charming vistas from bay windows of the casement type, spacious workshops and laboratories, a dark room, and music and art classrooms opening out onto a wooded forest preserve

Even though not every school plant can meet these specifications, the teacher can create an atmosphere that is inviting and a school environment that will bring children to the close of the day with a relaxed, contented attitude, a feeling of accomplishment, and eager expectancy for another day

Classroom Organization and Management

Life in the classroom where activities centered in unified experiences are under way will present a contrast with the passivity that characterizes conventional teaching

Teachers in the New York City schools (23) have listed the following evidences of successful teaching techniques in modern classrooms

The teachers and pupils work together in a friendly, cooperative, helpful spirit They often make plans together

The teacher sees that everyone contributes and has a share in the activities

Each child has a definite goal and recognizes his responsibility with respect to it

The teacher employs a variety of techniques in class management and pupil direction

Children are encouraged to raise questions about anything that arouses their curiosity or that they do not understand

Children are encouraged to bring in materials and suggestions for projects from outside

There is orderliness that comes more from consideration and thoughtfulness than from fear of what the teacher or principal will say

The Classroom as a Workshop

The nature of the building and furnishings of the classroom reflect the type of program under way. In the school where worthwhile things are going on, the classroom has the aspect of a busy workshop. There is something for every child to do as soon as he enters the room. The very appearance of the room invites activity. There are materials to work with, books and sources to consult, and bulletin boards and exhibits to look at. There are work tables, a work bench and some simple science equipment.

The flexible, informal arrangement of portable seats and tables indicates that the room is equipped for children to carry on activities, not merely to listen passively. With movable furniture and materials easily accessible, the children can work together in pairs or small groups.

Arranging chairs in a square or circle promotes socialization of the group and is desirable for discussion period. For other activities, when all need to face the blackboard or to read from charts, straight rows or semicircles are preferable.

The pupils themselves have a large share in making their school environment attractive and workmanlike. The wall space should be brightened with pictures, bulletin board clippings, murals, and displays. The children feel that this is their school and that they are participants in creating the life in the school. Everywhere there is evidence of the children's own work.

Children Learn to Manage Themselves

In a school where workshop methods are used, the pupils have more opportunity and a greater obligation to learn to manage themselves. The children are given freedom to move about and confer with one another, provided they show due consideration for the rights of others and observe the "rules of the road." A new conception of orderliness, the kind that is needed to accomplish work efficiently when a number of people participate, prevails in the classroom. A variety of tools and materials is used. Verbal communication is not banned, but assumes its legitimate place in planning and instructing. Complete self control is not demanded at once, but is viewed as a product of a growth process in which children are helped to mature through their school-life experiences.

A child who was transferred from a school where everything was under the teacher's strict control to a school where children had been

accustomed from the earliest grade to move about freely in connection with their projects thought that the children were "cutting loose" just as they pleased. Some time elapsed before he understood that the children were moving about under their own controls without having every action first approved or dictated by the teacher. Visitors to "activity" schools sometimes gain this same false impression when they see children moving about without first asking permission of the teacher. Closer observation will show that the children are busy at their work and not aimlessly "doing as they please."

In one school, where the children go to the drinking fountain on schedule, the teacher tells each child just how long he may drink. This is certainly rigid school management. Children should not have to ask permission for every move they make; they should learn to operate successfully "under their own steam." Children consider it a privilege to be given responsibility. It is astonishing to see how well they can direct and control their behavior when what they are doing seems worth while to them and they have a chance to exercise judgment. Instead of abusing their liberty, they take their obligations seriously. Nothing flatters a child more than to be made to feel that his ideas count for something. More things could easily be made optional for children at school. They learn to use freedom by having a chance to make decisions for themselves.

Living Together at School

The modern classroom may be considered a miniature society with children and teachers working and playing together, and inviting other groups in the school from time to time to see their exhibits and to share their experiences.

In the school that seeks to establish a cooperative rather than a competitive atmosphere, the class group is treated like a family in which intimacy and warmth are generated, and friendliness, self-confidence, and loyalty are inspired. In this environment, the individual's potentialities as a contributing member of a social group can be developed.

Social behavior is learned through working on group goals or tasks. Life in a good school is so organized that children learn to get along with one another, become amenable to the suggestions of others, and develop attitudes of tolerance and self-respect. The children learn that to complete a group task successfully, every child must cooperate in working toward a common end. They find this is as true in school as in life outside. A cooperative spirit is fostered

among the children through plays and games, parties, clubs, and organizations. Emotional security is gained as each one finds his place in the group.

The children plan together and work side by side. They take turns serving on committees set up to take care of classroom routines. In one third grade there were lunch, flowers, library, errands, orders, and absences committees. Electing committee members and class officers contributes training in citizenship.

Excursions, trips, planned recreation and parties offer additional means of broadening children's acquaintance with one another. Early in the year a 'whole school' picnic to some interesting spot can become a socializing project if the children do the planning and make the preparations.

Pupils can see that newcomers are introduced in the school and welcomed into the group.

Pupil Participation—As Kurt Lewin has observed, autocracy is a condition imposed on people, but democracy requires that we learn how to participate actively in affairs. In the modern classroom, this learning begins with the very youngest children who are encouraged to make suggestions, confer with others, advise the teachers, draw up recommendations that summarize group opinion and take group action on matters that concern them all. Gaining this experience early gives children a longer time for practice so that in high school and later in community affairs, they can participate in group life more skillfully. Pupils thus learn how democratic principles work by first-hand experience.

When children help to plan school activities, they take a keener interest in their work and are more willing to strive toward objectives they themselves help to set up. When they have a part in choosing, their activities are automatically adjusted to their interests, even to their ability levels. As a result school work does not seem so remote from the life they live out of school.

One criterion of progressive teaching is the extent to which teacher and pupils plan activities together (23). There are many ways in which children can participate in classroom planning: making out the daily schedule, arranging for special activities such as a class entertainment, selecting and developing the unit to be studied, obtaining materials, planning trips, handling matters of class discipline, decorating the room, making a school garden, preparing and serving a tea for the parents, choosing books for the class library, or planning an assembly program.

At some times the planning done by the children and teacher together will be formal, at others, highly informal. More formal planning should take place in developing a large unit or in working with other-school committees.

It is well to set a time early in the week and early in each day for planning, because committees must be chosen, the work divided, and tools and materials obtained before work begins.

Opportunities for Conversation.—When children have normal opportunities for conversation during school hours, there is less need for suppressing whispering. After all, the school enrolls not dumb animals but children whose preferred means of communication is conversation.

Class discussion is made an educative feature in unified teaching. Deciding on topics for study calls for considerable discussion, and so does planning steps to be taken in studying the topics selected, planning the day's work, reporting results of study, raising questions, and considering next steps.

There are times when the children need to confer with the teacher or with one another about their work, there are frequent announcements to be made, and there are social activities requiring conversation. Again children may wish to make spontaneous comments.

Not all these occasions can be rigidly controlled by the teacher's nod. When a child wishes to confer with another, he may do so, as quietly and unobtrusively as possible. Small groups gather from time to time with freedom to talk to each other during their work or play, so long as they do not disturb others. By showing good sense they earn this privilege. Children can learn to exercise restraint when a class is large and study is going on. They are taught the circumstances under which they can talk, learning courtesy and consideration for others at the same time.

Working Together in Groups

In traditional teaching methods, each child usually worked at his lessons by himself. His group contacts were limited to competitive contests with other individuals to see who could excel. The newer trend is to promote group participation in the belief that an individual's highest level of thinking and his ability to make successful adjustments to other persons are best achieved through social interaction. Working successfully with others is a skill which has to be learned by most children but it is as valuable a skill as ability in arithmetic, reading, or spelling.

Social participation in group activities helps children learn the value of orderly procedure taking turns working with a leader contributing a share to the common cause. This skill is not learned by chance but is definitely planned for in the modern school.

In schools where modern practices prevail provision is made for several kinds of groupings

- 1 The entire school population considered as the group. The occasion may be an assembly program school picnic athletic meet or Christmas bazaar
- 2 Large group activities that include one entire class or cut across several classes. Children from several classes may stage a play or present a dance or musical program
- 3 Small group projects within a class. Several children within a class group may undertake intensive work on a separate project such as painting a mural making puppets reporting what they have observed on a class trip or taking charge of library books

In some cases a child may need time to work alone instead of in a group on a problem that requires his full attention

In the primary grades small groups are usually temporary and frequently change. Intermediate children are more capable of working together as an entire class

There is a tendency to provide more time during the school day when children of different age groups can work together informally as they do when they work and play together outside of school

In group work large schools have an advantage over small schools because more children can be brought together who share the same interests

The schools in Montgomery County Maryland favor flexible groupings of lower primary upper primary lower intermediate and upper intermediate grade children in place of single grade groupings for class activities. In these schools no teacher is restricted to a single class and older and younger children from several grades may work on a project together

Working cooperatively in groups does not necessarily subordinate the individual. Each child participates in the group project in the role best suited to him whether the activity is producing a class play improving the school playground or making a garden. But each pupil learns to coordinate his individual achievement with that of others in working toward a united goal. Several sub groups may be working on different phases of a larger project at the same time

Successful group work requires leadership. This leadership should come both from the teacher and from pupil leaders selected by

the group Leadership positions can rotate as pupils attain skill in directing others

Learning to work successfully with a group is a skill to be achieved through practice It is not gained at a single exposure, nor do all pupils achieve the same degree of skill from similar training

Group cooperation can be encouraged and improved by rewarding pupils on a group basis for successful cooperative effort Such rewards are as well deserved as the customary individual rewards for tasks well done

Exchange of Ideas in Group Discussion.—Group discussion is considered an indispensable feature of school experience Class conferences offer an opportunity in the daily program to discuss plans for work, to estimate outcomes, to express ideas for group consideration, to develop a tolerant and understanding attitude, and to encourage unified effort toward a common end Unhampered exchange of ideas among the children can create mutual interest

In some schools a discussion period is held shortly after the children's arrival when they are full of things to say and eager to share their plans and ideas Other teachers favor no set time for a discussion period, but give children an opportunity to talk things over at any time when the need or opportunity arises During discussion, children make suggestions vote on topics and suggest new avenues of exploration During their club and committee meetings they outline programs, conduct forums, and debate issues in an orderly fashion In free discussion there is danger that leaders in the group may monopolize the conversation It is the teacher's responsibility to see that all participate

Vigorous debates in the classroom, where each pupil has to defend his statements with facts furnish children with an outlet for energy that might otherwise be directed toward misbehavior

Boys and Girls Together

In many schools there is a tendency to segregate too early the boys and girls for different activities The more progressive schools have been outstanding in their attitude against segregation in the elementary grades Boys and girls are found working together in the same enterprises with no sharp distinction between what the boys do and what the girls do It is not considered sissified for a boy to cook, use a sewing machine make a costume wear an apron, nor tomboyish for a girl to saw hammer do scientific experiments, or handle mice and ill smelling liquids The boys are not so early made aware

of masculine "superiority," nor the girls of "ladylike" qualities. Judging from the results, children of both sexes develop more wholesomely when emphasis on these distinctions is omitted.

In this reform, the schools are now aided by the times in which we live, for women are driving cars, piloting planes, and engaging more generally in the same sports as men—frequently in competition with men. In war work, women steadily gained parity with men, a social change which may become permanent. The schools, by avoiding premature sex segregation fall into step with this trend.

Work Habits and Study Skills

Good work habits are as indispensable in schools using unified teaching methods as in the subject-centered school. Nothing worth while can be accomplished unless children plan their work, budget their time, economize on effort, concentrate while working, and set high standards for completed work. With unified teaching the school is in a fortunate position to instill these habits in children while they are working on their projects independently or in small groups. Under these conditions habits should be formed which will be more lasting and have more "carry over" than enforced responses to work already planned and minutely supervised by the teacher.

More important even than seeing that a child solves ten arithmetic problems correctly, is the matter of developing in him the attitude that those problems must not only be done accurately, but they must be checked, they must be completed within a reasonable time, and the answers must be legibly written. Attitudes such as this, formerly considered chance by products, now become of central importance in the child's learning.

Good habits that children should form in the elementary school include

- Planning a job before beginning to work
- Following directions and orders
- Assuming responsibility for the completion of a job
- Working cooperatively with others
- Avoiding interference with others at work
- Accepting and acting upon constructive criticism
- Achieving good workmanship
- Handling materials carefully and taking care of tools
- Cleaning up and putting materials away at the conclusion of a work period
- Studying quietly and with concentration

Assuming Responsibility

The child growing up in a school where pupils are permitted independence of action and where they are placed in situations in which they need to exercise judgment and initiative will develop a sense of responsibility, whether this obligation is preached to him or not. As a result, he will be better able to manage himself.

Some teachers, like young parents, find it hard to let children do the things of which they are capable. It may be easier and quicker for the teacher to do the job herself, but there is value for the child in requiring him to handle jobs that call for planning and thinking, even if he must struggle a little with tasks that present some difficulty.

The child who is over sheltered at home needs assistance in learning to help himself more. Instead of being babied, he needs to begin early in life to assume responsibility for his own conduct. His personality, character, and individuality develop best when his efforts are directed by his own purposes. Even young children show eagerness to 'let me do it all alone' or "find out for myself," but they are too often denied these opportunities.

It has been found that giving children increasing responsibility for their activities and conduct at school serves to reduce the number of issues that arise between teachers and children, issues that in the traditional school were largely settled through the teacher's fiat.

The many situations at school which can give training in responsibility include caring for and using intelligently both personal possessions and those shared by the group, budgeting time, working out a schedule and keeping to it, assuming care of class finances, participating in school and classroom management, and checking and evaluating outcomes of work.

Helping the Child to Become Responsible.—Clearly, both teacher and school share in the obligation of assisting the child to become responsible. Generally speaking, the child should be encouraged to undertake tasks or duties of his own volition, it is important that such projects be definitely within the capacities of the child. He should be made to feel that it is his job to finish. Intelligent counsel and guidance should not be withheld, but never should he be allowed to feel that a crutch is waiting when enthusiasm lags. More specific ways in which teachers can help the child develop an increasing sense of duty and responsibility include

1. The foundation should be laid in the first grade by making even the youngest children responsible for such small tasks as getting out and putting away their clothing and materials
2. A program should be instituted that necessitates the making of choices among varied activities and holds the child responsible for accomplishment in the area in which he has chosen to work
3. All possibilities for giving children real jobs to do about the school should be explored. The children themselves should take charge of these tasks, either individually or working in committees
4. School children should be assisted in checking outcomes of their work on these tasks
5. Many children could benefit from talking over with the teacher the importance of 'growing up' so that they can take on more responsible duties
6. Older children should be given more responsibility for the younger children in the school
7. The children should assume responsibility for the selection and care of the materials they use in their projects

The teachers and school authorities should explore all the possibilities that life in the school offers for real work experience for children. Even the youngest child in the kindergarten can have some share in work tasks about the school. In the upper grades and high school there are some tasks which it may be desirable for pupils to undertake on a pay basis so that they will not only be rewarded in a tangible way for their efforts but learn at the same time to handle small sums of money that are their own. One advantage of the unified program is its adaptability to work experiences in and about the school.

One principal reports that the children in his school share in the school housekeeping and perform all the routine tasks about the school, they deliver milk, take care of books, distribute and collect library cards, keep bulletin boards in order, take charge of supplies, take care of small accounts (e.g., the milk money) and collect funds and materials for salvage 'drives'. The children have also taken charge of various campaigns: China children's relief, Red Cross Labrador mission, war fund drive, and Victory Books drive, and they have run the various clubs organized for this work. Conducting these clubs requires making plans, recording minutes and observing rules of order. Fourth grade children ran a post office where war stamps and postage stamps were sold.

Children from the first grade on should learn to manage their individual routines and participate in classroom duties. Very early they

can learn to make choices Six year olds in one school voted whether to hold their picnic in the park or at Helen's farm Nine year olds voted on the best way to master the multiplication tables Seven-year olds voted on the best form in which to draft a letter They also voted to choose the best letter to send to their parents

In another school children assumed responsibility for beautifying the building and grounds In this task the children worked with the school faculty committee, the parents' organization, and the city garden club Children tend to show more respect for school property when they are made responsible for it

Keeping materials available where children may help themselves without calling on the teacher fosters self-reliance Other suggestions for activities which may build a sense of responsibility include

- Taking turns in conducting the music or teaching the class a new song or game they know
- Caring for the library or reading club materials
- Doing light janitorial and monitorial work
- Choosing certain pupils to take charge of a group on an excursion or other group enterprise
- Watching room temperature reporting on weather, etc
- Caring for playground and garden
- Keeping records of plans and achievements
- Taking charge of the safety patrols, fire and other drills
- Setting their own assignments

If the children ask to have a school party they should be told they may if they will first bring the teacher a plan for the party and then do the preparatory work themselves

Learning Democratic Attitudes at School

Conventional schooling has been blamed for its failure to teach democratic living and inculcate democratic attitudes The newer school practices make an effort to overcome this deficiency Instead of appealing to teacher authority whenever any action is to be taken, children are encouraged to solve their problems through group action

There is a difference between teaching about democracy and guiding children to live democratically at school The greater value for children lies in the second alternative Democratic principles operating within the school can help children to achieve skill in responding democratically throughout their lives In place of having to obey a teacher's arbitrary commands the children should give voluntary consent to ideas through mutual consultation

Several children were overheard one day scrapping about some thing outside the classroom. Suddenly they stopped and said, Let's settle this in a democratic way. Then they trooped into the class room, elected a chairman and proceeded to settle the business to every one's satisfaction. This opportunity for discussion at the point of conflict gives children techniques for resolving their difficulties peacefully.

Children are entitled to participate in school management duties appropriate to their age. How well would the class run temporarily without a teacher? The school without the principal? This is always a good test of functional democracy in everyday school affairs. There is no reason why the children themselves should not conduct the class on occasion, thereby gaining new competence in self management. Children who become accustomed to freedom usually do not abuse it.

Learning self-direction is a growth process in which individual differences are apparent. Some children need more clearly defined tasks set by the teacher; others of the same age are mature enough to assume responsibilities independently. There are times when all must follow instructions; other occasions when all may safely work under self direction.

Educative Discipline

Discipline is not an old-fashioned, outmoded concept. Controlled behavior is as desirable today as it ever was. Since the child does not always have sufficient insight to see the need for curbing his impulses, taking precautions to insure his physical safety, respecting the property of others, or working harmoniously with others in a social situation, he must be disciplined. Children have responsibilities as well as rights; they must perform certain duties, obnoxious as these may seem at times. Thwartings, prohibitions, and inhibitions are still needed to help regulate and control behavior.

In school practice, conformity to external authority has been the usual concept of discipline. The modern school too believes in control, but it strives always toward the democratic ideal of self-control in which teamwork and fair play are essential elements.

Children trained under regimentation too often show outward conformity but feel deep resentment underneath. External pressure for conformity can be relaxed when children develop insights through which they can sense the occasions when conformity is the wisest course. Group sentiment may exert all the pressure that is necessary. Regimental control is not the American ideal in education. The aim

is to make children conscious of the need for self-control and willing to practice it, for self discipline is the only kind that really counts

A persistent problem in the modern school is how to encourage independent activity yet preserve discipline and order, to achieve all values to be gained from freeing the child, yet still control his actions. Neither extreme, slavish conformity or unbridled self-expression, but the appropriate behavior called for by the particular situation should be the objective

A child in a modernized orphan asylum commented to the matron, 'We don't have enough rules any more. It used to be such fun to break them'. Teachers can preserve an informal atmosphere but still teach children that there are times when implicit obedience is expected and when regulations must be adhered to for the good of all. This was demonstrated most clearly in "activity schools" during the war when air raid drills had to be carried out and certain restrictions necessarily had to be imposed on the children. The newer school sets up few rules and imposes few restraints so that children can direct their energies toward constructive activities. The objective is not the control that comes from authoritative dictates, but the sort of control that resides in the nature of the work to be done.

Instead of disruptive prohibitions, the resourceful teacher has some constructive alternative to propose if the child's activity is leading in the wrong direction. Good behavior is not attained through awarding conduct buttons for deportment and effort at the end of each month to the children who have worked hard to earn the buttons, good conduct and self-control are learned through the voluntary choice of "good" behavior in situations that call for decisions between right and wrong.

Moral pressure from the group can be effective in punishment. Grievances and infractions should be aired openly. Scolding, threatening, shaming, forcing apologies, and using prolonged or repeated detention and corporal punishment should be avoided. Such practices defeat all attempts to establish friendly teacher-pupil relationships and have a bad effect on morale.

There is little place in the modern school for retaliative punishment, for making the child "pay for it". This sort of punishment ruins morale. More effective disciplinary measures are denying privileges requiring the culprit to do over correctly something done wrong, making him clean up after careless accidents or reasonable segregation. Class control through social approval and disapproval is often more effective than the teacher's repeated admonitions. When he is punished, the child should understand that he is not disliked nor per-

manently ostracized but that on the contrary, people still love and appreciate him

Children Participate in School Management

When pupils participate in school government they can develop skills that will be needed in adult citizenship. School government should be a cooperative affair in which teachers, administrative staff and pupils work together. The teachers do not step out and turn everything over to the pupils but allow the children as they gain in experience to assume more responsibility for school management. Even in the primary grades children can have a voice in deciding school matters that affect them. In the higher grades they can play a more prominent role; they can manage their own clubs and organizations and set up rules for conduct in classrooms, in the halls, in the cafeteria and on the school grounds.

In one school there is a Civics Club to which all the children in grades three to six belong. The club meets once a month to consider problems that concern the entire school. The children elect their own officers, plan meetings, consider matters of playground behavior, discuss health policies and interclass relationships and plan assembly programs. The club president must learn how to deal with his constituents, how to lead rather than boss, and how to guide discussion. Teachers serve the group in an advisory capacity.

School government councils, consisting of the principal, elected representatives of the teachers and elected representatives of the pupils, have been set up in other schools. The school council should not run the school but can assist in its government and work to improve the citizenship of the entire school. Running a student council gives pupils valuable experience in social relations.

Problems which concern the whole school or the grades from which the council members come should be discussed. The council may meet once a month or oftener as emergency needs require. Council members may head committees planning a school party, take charge of gifts from the school to a welfare project, bring to the attention of the whole school group some matter such as our part in keeping the toilet rooms in good order. A faculty adviser or counselor should be present at all meetings of the school council. Teacher-pupil work committees may be formed from time to time.

The business conducted at one elementary school council meeting, attended by children from grades three to six, proceeded somewhat as follows:

manently ostracized but that on the contrary, people still love and appreciate him

Children Participate in School Management

When pupils participate in school government they can develop skills that will be needed in adult citizenship. School government should be a cooperative affair in which teachers, administrative staff and pupils work together. The teachers do not step out and turn everything over to the pupils but allow the children as they gain in experience to assume more responsibility for school management. Even in the primary grades children can have a voice in deciding school matters that affect them. In the higher grades they can play a more prominent role; they can manage their own clubs and organizations and set up rules for conduct in classrooms, in the halls, in the cafeteria and on the school grounds.

In one school there is a Civics Club to which all the children in grades three to six belong. The club meets once a month to consider problems that concern the entire school. The children elect their own officers, plan meetings, consider matters of playground behavior, discuss health policies and interclass relationships, and plan assembly programs. The club president must learn how to deal with his constituents, how to lead rather than boss, and how to guide discussion. Teachers serve the group in an advisory capacity.

School government councils, consisting of the principal, elected representatives of the teachers, and elected representatives of the pupils, have been set up in other schools. The school council should not run the school but can assist in its government and work to improve the citizenship of the entire school. Running a student council gives pupils valuable experience in social relations.

Problems which concern the whole school or the grades from which the council members come should be discussed. The council may meet once a month or oftener as emergency needs require. Council members may head committees planning a school party, take charge of gifts from the school to a welfare project, bring to the attention of the whole school group some matter such as our part in keeping the toilet rooms in good order. A faculty adviser or counselor should be present at all meetings of the school council. Teacher-pupil work committees may be formed from time to time.

The business conducted at one elementary school council meeting attended by children from grades three to six proceeded somewhat as follows:

The chairman, a sixth grader elected by the council, was in charge. The secretary read the minutes of the preceding meeting. Each child had a mimeographed copy of these minutes. Two matters were brought before the group. In the first case, the grandmother of one of the children had requested books, toys, and magazines for two settlement houses. Several parents present at the meeting explained the work done at these settlements and the need for the gifts. The children asked many questions and discussed the issues raised. They were uncertain whether they should vote on the issue. One child commented that if they delayed action it would be too late to do anything. The question was raised whether damaged toys would be acceptable. This matter was referred to the secretary who was instructed to inquire of the grandmother. The question of what types of books to send was asked. Should they send any comics? One child said the children would learn history from the comics. "Yes," said another, "but you don't want them to grow up learning their history from the comics." A teacher suggested that they inquire of the head of the settlement what the children would prefer. The pupils from all classes represented entered freely into the discussion.

The next matter discussed was a request for money from the committee of a welfare organization. Several adults told how money was needed for summer activities for the underprivileged children of the neighborhood and gave the background of the committee's work. This proposal also led to active discussion by the council members.

A Kansas teacher has described the school council in a twelve room public elementary school as follows:

The council is composed of twenty-four children and the principal, who sponsors the group. Early in the term each class teacher appoints one boy and one girl to represent the class.

Council meetings are held once a week during a 30 minute period preceding the opening of school in the morning so that the representatives may report council matters to each class when school opens. The officers are a president and secretary elected from the sixth grade representatives.

The aims of the council are as follows:

- 1 To help school children become better citizens
- 2 To improve conditions in the school
- 3 To help children learn to cooperate with one another
- 4 To help pupils understand that government, rules, and regulations are for their protection

The council is not a disciplinary organization and no member is responsible for the conduct or correction of other children. Any teacher or pupil may suggest matters that should come before the council.

Matters that have been considered by the council include arranging for Halloween fun conducting morning assemblies placing trash containers on the school grounds eliminating the dangers of snowballing and the hazards of running in the halls or on the stairs using paper towels economically gathering toys for Christmas distribution sending thank you notes to the Fire Department during Fire Prevention Week and sending letters and gifts to sick children

Through participation in the council the pupil representatives can develop leadership grow in the responsibility needed to manage their affairs and improve standards of conduct in the school

In another school separate grades hold student council conferences to discuss such matters as methods of keeping the bicycle room in better order Plans are decided upon committees appointed and responsibilities assigned and carried out by the pupils

It is impossible to have a successfully operating school council without at the same time educating the staff and all the children in its purposes Without this preparation there may be charges of partiality, unwise decisions or failure to refer back to the classroom the decisions reached A council elected to handle school affairs may fail unless the entire school understands its function and purposes The council members need to work together cooperatively there must be wise staff guidance membership should be frequently rotated and leaders must be carefully chosen

School Assemblies

The assembly is becoming a regular feature of school life not as a weekly 'chapel' period arranged and managed by the school staff, but as a genuine learning experience planned and conducted by the children and their teachers The assembly has been called the heart of the school It can become an educative event in every school if all of its possibilities are fully realized

The school assembly can contribute much to life in the school for it brings together pupils from different classes and a variety of age levels and provides an opportunity for large groups to share experiences to work together on joint projects and to enjoy common interests The assembly can be an opportunity for exhibiting school accomplishments and a stimulus for creative achievements in music art, drama literature and other areas Through the assembly meetings, children from separate classes have membership in the whole school community The different classes can present to the rest of the school phases of their regular class work that have occupied and interested them Agnes Adams presents a variety of opinions as to

the purposes, preparation organization, and production of assembly programs (1)

Almost any phase of school work can be adapted to an assembly program. There may be dramatizations, community singing and musical appreciation programs, a verse speaking choir, radio hours, poetry presentations, programs of dances, or puppet shows. Much of the material for such assemblies can originate with the children.

Preparations for the assembly may go on in the classroom as part of the regular day's work, with pupils serving as chairmen and members of various committees. Sometimes an informal assembly can be given with little advance preparation, as, for example, in the case of the first assembly of the year when teachers may call on several children to tell about their vacation experiences.

In the "Little Red School House," New York City (6), there is a short daily assembly at the beginning of the school day. The lower grades attend twice a week, the upper grades twice a week, and the whole school once a week. These are short sessions with some interesting event featured at each meeting. Other schools hold less frequent but longer assemblies which may last an hour or so.

The assemblies of the elementary division of the Horace Mann Lincoln School, New York, have always been an intimate part of the school life. Through its assemblies the whole school works as one group. Once each week at an hour reserved for that purpose the upper elementary school assembles in the auditorium (30, 32). The assembly may be held for a general discussion of problems relating to the whole school, for instance, "Taking care of one's self in the lunchroom," "The work of the student council," etc. It may, on the other hand, be a program at which most of the students are listeners or spectators, a motion picture such as "The History of Aviation," a dramatization with pupil actors, a speaker or artist from outside the school, an expert on children's reading telling about new books and reading excerpts from good stories and poems, or an interesting radio broadcast. The assembly programs are articulated as closely as possible with class projects, and the most worthwhile are those arranged by the pupils as a part of their regular school activities.

Programs presented by the children should be based upon their units of work. Typical themes are How Man Has Made Records, The Story of Milk, America the Beautiful, Our Good Neighbors to the South, China, A Study of Textiles, or The Weather. A program of creative music, singing or dancing, a demonstration of summer activities, or a dramatization of a play written by children may be given. Afternoon club groups can demonstrate their accomplish-

ments in assemblies. The children might hear a talk on Africa by a parent who has recently returned from that country, a teacher might tell *Uncle Remus* stories in dialect, an authority on nature study could give a talk on birds and insects, or the school librarian could show a collection of new books and read selections from several of them. Every kind of program that has educational value should be considered when planning assemblies.

The high school assemblies are also an important part of school life. They should be considered as a medium for student expression rather than as meetings for mere entertainment. The programs should be supplied by class groups, clubs, departments, and the entire school. Outside speakers, invited on occasion, should be chosen because of their special qualifications and the timeliness of their messages. The assembly should be under the joint control of a student and a faculty chairman with representatives from the student body and faculty acting in an advisory capacity.

The high school may often invite the older groups of the elementary school to an assembly of joint interest. In turn, the elementary school may sometimes invite high school groups to a special assembly program. There are some assembly programs which could be presented by the entire elementary and high school working together.

The School Paper

A school paper run by the pupils under the direction of teachers affords many values—opportunities for children in several grades to work and plan together, chances to develop and practice leadership, a means of building school spirit, an incentive to improvement in expression, an outlet for creative expression in language and art, and a means of establishing contacts with the parents.

Pupils at the Lincoln School, New York, published the *Elementary Special*, a mimeographed "newspaper," as a cooperative enterprise for children in Grades IV to VI. The sixth grade assumed responsibility for management, editorial work and publication of the enterprise. One of the teachers who took a special interest in children's literary efforts served as faculty critic and sponsor of the project. Children in the upper grades eagerly submitted their contributions for "publication." In a similar manner, the high school publishes a weekly photo-offset sheet, *Highlights*.

An adventure in elementary school journalism at the P. K. Yonge School in Florida has been described by staff members of the school.

Developing the school newspaper and magazine as an educational experience for the upper grades is a central project in several units described in *Teaching Language in the Elementary School* (27). See also the report of Merrick and Seyfert (18).

Time to Work at Hobbies

Normal children are natural hobbyists and easily interested in anything they can do with their hands. The traditional school lost an opportunity by failing to cultivate children's interests in their hobbies and giving them little time to experiment in making gadgets, fixing chemical mixtures with by-products of smells and little explosions, or working with motors, engines, and electricity. The modern school encourages such activity by making a place for it in the school day.

School work can have a serious purpose and yet give children time to work at their hobbies. It is an old-fashioned idea that just because comparatively few are interested in some activity it must be considered "extracurricular" and relegated to after school hours. There is an advantage in giving a child time for his hobbies during the school day, for at school he can receive the expert help he needs which is not so often the case at home. Furthermore, at many points his hobbies will fit in with other school activities.

"School life activities" seems a better term than "extracurricular activities" to describe children's work on special interests. In following his hobbies the child has a chance to express his ideas creatively, to develop initiative and mental alertness, to follow interests that may lead to his vocation later, and to achieve new skills, insights, and information.

The purposes in providing hobby clubs and recreational activities at school are: to broaden the child's range of achievement, to widen his outlets for experience, to give him more independence in making choices, and to increase his sense of responsibility.

In some cases the school arranges for a free work period one afternoon a week when children can work on individual projects in shop, laboratory, or studio, or meet in "Hobby Club" groups. Activities and hobbies the children may enjoy include cooking, sewing, swimming, making costumes, music, drawing and painting, photography, story writing, scientific experiments, dramatics, first aid, pottery, and metal work.

Typical activities for "free work" groups are making puppets to be used later in a puppet play, dancing, singing, learning to play musi-

cal instruments, writing poems and stories for the school paper, weaving with beads, and making head bands, rings bracelets and belts. Making collections of shells arrow heads, rocks, books stamps, miniature animals, or scientific materials should be encouraged.

A sixth grade group made preparations for staging "Robin Hood" during its weekly free work period adapting their play, with its quaint language, from the stories they had been reading. Several gifted children did the writing some designed the costumes, some created the stage sets, some planned the music some worked on the costumes, and some handled other details behind the scenes.

All these free work activities require close supervision to prevent too much waste of effort, time, and materials even though creative work that produces anything worth while requires time and must inevitably involve some waste even under the best conditions.

The School Social Program

Instead of looking upon parties and pageants as extracurricular, the modern school considers the social program an integrated part of school life, because it offers invaluable experience for growing boys and girls to learn the social amenities helps to make better human relations, gives training for planning and responsibility, and provides recreational outlets that will lay the basis for adult leisure activities later. Parties, picnics, sports plays pageants, and musical events should all be considered educative in the highest and fullest sense of the word. This social program, although it represents but one phase of the full unified program must be looked upon as a valuable means of broadening and enriching children's lives. Social activities can be related at many points to curriculum units to community activities, and to intercultural education and health activities. They should be shared alike by teachers, pupils, and parents.

School Recreation Clubs

Every boy and girl should have a chance to belong to a school supervised recreation club especially in a large city where other recreational facilities are lacking and where mothers as well as fathers are usually employed. These clubs can extend the school's supervision to include the child's after school leisure hours. The after school clubs can give additional opportunity for children to develop individual interests and to do a freer, more creative type of work not limited by arbitrary standards.

Teachers from ten or twelve schools can join together to organize groups in which children learn crafts and enjoy physical recreation. The clubs can be an extension of school work beyond the regular closing hour, although some schools arrange for club meetings within the normal school day. School clubs should be organized around interests manifested by the group. These may be pottery and sculpture, carpentry and crafts, cooking and sewing, swimming, folk dancing, dramatics, science, astronomy, photography, or first aid.

High school clubs may include biology club, science club, dramatic club, school magazine, school newspaper, glee club, jazz band, camera club, Red Cross, orchestra, French club, fine arts club, folk or social dancing club, Boy Scouts, Girl Scouts, first aid club, radio club, hiking or outing club, sports club, or literary club. Each organization should be conducted by the children.

These club activities call for skilled leadership if they are to contribute most to wholesome development. Financial aid may sometimes come from the community or from parent funds.

Franklin and Benedict have described the activities of after school clubs under school auspices in an underprivileged neighborhood (8).

Character Education

Good character has been defined as "the quality of an individual's behavior which enables him to live happily and effectively in a world with other people." Character may be considered as nothing more or less than a set of habits and deeply ingrained attitudes, habits of feeling, thinking, and acting, and attitudes toward the self and the self in relation to others. As an educational objective, character development, which means forming right attitudes, is just as important as intellectual training. It is a process that is far broader than schooling since only a small segment of the child's life is lived at school.

In training character, it is essential to help children understand what is right and wish to do what is right, and then to give them ample practice in doing what is right.

The newer conception of character training is that character traits are formed not by memorizing subject matter (slogans, proverbs, rules for conduct and the like), but by living as a person of good character. Formalized character training as a school subject in which character lessons are taught is futile because artificiality results from attempts to separate character training from general education or learning about good character from being "good." In the best schools

character is developed in the pupils not as a result of direct training or admonition, but through morale built up and sustained by the whole school program. In fact emphasis on formal lessons in character building may prevent the learning from functioning when an occasion arises for the child to behave in a noble unselfish cooperative honest courteous sympathetic or morally upright way.

The newer school practices put more responsibility on the children for building their own characters. Telling children to be good is found to be less effective than making it possible for them to live according to high standards. In the area of character development the teacher's task is to make the whole life of the school contribute to character building. To learn tolerance thrift honesty and other desirable personal character traits and attitudes the children do not have to study character but must live and work in school in ways that promote the development of these traits and attitudes.

The modern school seeks to train children to be habitually considerate of others without losing independence of thought and action. Can this be done? Certainly provided an atmosphere of mutual helpfulness is created and maintained in the schoolroom. Calling on the older children to help the younger much as at home helps form character as does the developing of a sense of responsibility and the ability to handle emergencies effectively.

Good Manners

Good manners are only established customs that ease human adjustments. Without rules of the road confusion inefficiency and friction would result. Formal training in manners as an isolated field of learning may produce superficial behavior that looks well but is not so desirable as genuine courtesy exhibited spontaneously on all occasions.

Acquiring good manners is a learning process in which practice in realistic situations is the most direct route to improvement. In the modern school with its provisions for group participation in daily school life good manners are inculcated informally and become part of normal behavior rather than superficial formalities imposed on children by adults.

QUESTIONS AND TOPICS FOR STUDY

1. How is life in the school affected by the type of curriculum that prevails? What differences would you expect to find between life within a traditional school and one organized on the unified activity basis?

- 2 Is informality in the classroom impractical in a large elementary school?
- 3 To what extent are socializing experiences possible and desirable in a school? Cooperative activities?
- 4 In what ways can children be helped to develop more individual responsibility in the classroom?
- 5 Should pupils participate in classroom management and school government? Under what conditions?
6. Is a school council consisting of elected members from all the middle and upper elementary school grades desirable? What safeguards are necessary to insure success in council work?
- 7 What are the newer trends in classroom discipline? Describe some of the problems in class management that a teacher must meet in the newer type of program described in this chapter
- 8 What are the educational values to be derived from school assembly programs? How should the assemblies be run to insure that these values are absorbed by the pupils? Observe and describe several truly educative school assemblies
- 9 What contribution can school assemblies make to life in the school?
- 10 What values are there in having children work at their hobbies in school?
- 11 What are the values of after school recreation clubs?
- 12 What features of life in the modern school contribute to the development of desirable personal and character traits?
- 13 Write five additional questions or suggested study topics based on the chapter

REFERENCES

- 1 Adams Agnes L. *Sharing Experiences Through School Assemblies* Washington D C Association for Childhood Education 1938
- 2 Bowen Genevieve. *Living and Learning in a Rural School* New York The Macmillan Co., 1944
- 3 Coffin Rebecca J. "Independent Work and Play Periods" *Childhood Education* 1938 14 218 222
- 4 Coffin Rebecca J. "Life in the Elementary School." *Teachers College Record* 1936 37, 372 382.
- 5 Cutts Norma E and Moseley N. *Practical School Discipline and Mental Hygiene* Boston Houghton Mifflin Co 1941
- 6 De Lima Agnes *The Little Red Schoolhouse* New York The Macmillan Co 1942
- 7 Dickie Donald J. *Enterprise in Theory and Practice* Toronto W J Gage & Co 1940
8. Franklin Adele and Benedict Agnes E. *Play Centers for School Children* New York William Morrow & Co Inc. 1943
- 9 Greenman Gladys. *Independent Work Periods* Bulletin of the Association for Childhood Education Washington The Association 1941
- 10 Helseth Inga O. *Living in the Classroom* Ann Arbor, Michigan Edwards Brothers Inc. 1939

- 11 Hockett, John R and Jacobsen E. W *Modern Practices in the Elementary School* Boston Ginn & Co, 1938.
- 12 Horrall Albion H and others *Let's Go to School* New York McGraw Hill Book Co Inc 1938.
13. Jacks Lawrence P *Education Through Recreation* New York Harper & Bros 1932
- 14 Keener Edward E. "The Elementary School Auditorium." *Elementary School Journal* 1940 41 269 276
- 15 Lane Robert. *The Progressive Elementary School* Boston Houghton Mifflin Co 1938.
16. Lewis Claudia et al *Toward Democratic Living at School* Washington Association for Childhood Education 1943
- 17 Macomber Freeman G *Guiding Child Development in the Elementary School* New York American Book Co., 1941
- 18 Merrick Nellie L and Seyfert, Warren C. "School Publications as a Source of Desirable Group Experiences" *School Review* 1947 55 21 28.
- 19 Reece Ellen S "Life Goes on in the School" *Progressive Education*, 1941 18 162 164
- 20 Seyfert Warren C. and Rehmus Paul A *Work Experience in Education*. Cambridge Mass. Graduate School of Education Harvard University (Pamphlet) 1941
- 21 Tippet James S and others *Schools for a Growing Democracy* Boston Ginn & Co., 1936.
22. Weber, Julia *My Country School Diary An Adventure in Creative Teaching* New York Harper & Bros, 1946
- 23 *Changing Concepts and Practices in Elementary Education* Board of Superintendents Division of Elementary Schools Board of Education of the City of New York 1942
- 24 *Course of Study for Virginia Elementary Schools, Grades I VII* Richmond State Department of Public Instruction 1943
- 25 "Education for Work and for Citizenship" *Review of Educational Research* 1944 15 Washington American Educational Research Association. Entire issue
26. *The Elementary School Environment and the Modern Curriculum Thirteenth Yearbook of the California Elementary School Principals Association* Los Angeles The Association 1941
- 27 *Teaching Language in the Elementary School, Forty-third Yearbook of the National Society for the Study of Education* Chicago University of Chicago 1944
28. "The Horace Mann School at Work" *Teachers College Record*, 1935 36 647 730 (By Horace Mann faculty)
- 29 *Interpreting Discipline Bulletin of the Association for Childhood Education* (Frances Mayforth ed.) Washington The Association 1944
- 30 Lincoln School Staff *Democracy's High School* New York Bureau of Publications, Teachers College Columbia University 1941
- 31 *Living and Learning in the Elementary Grades An Intimate Study of the P. K. Yonge Laboratory School* University of Florida Gainesville Florida, 1943 (By the P. K. Yonge School staff)
- 32 Lincoln School Staff *A School for the World of Tomorrow* New York Bureau of Publications Teachers College Columbia University, 1939
- 33 *Newer Instructional Practices of Promise, Twelfth Yearbook of the Department of Supervisors and Directors of Instruction* Washington National Education Association, 1939

Chapter 18

EDUCATION FOR HEALTH

Probably no subject is of greater concern to parents and teachers than the health of the children in their care. Good health is essential because it contributes to fuller, happier living, and helps the child to withstand the physical hazards attendant on growing up.

According to various estimates, 20 to 25 per cent of school-age children suffer from health handicaps and physical defects, at least half of which could be prevented, removed, or compensated for during the child's school life. Modern living, particularly under urban conditions, subjects children to considerable strain and tension which can be alleviated only by properly safeguarding their health. For these reasons the school today shows concern for child health.

Health in the School Program

Too frequently, the school program for health training has consisted of scheduled periods for physical training sandwiched in along with many other subjects in an overcrowded curriculum. From the modern point of view, every phase of school life which contributes to a pupil's physical and mental well-being is considered an aspect of health education.

Maintaining good health standards for children at school should be considered the responsibility of the whole school, with the program administered through the central school office. The chief concern should be to make health education a functional part of the entire school day rather than a series of formal textbook lessons. The objectives of the program should be stated in terms of healthful living for every child.

Health education should not be concerned primarily with disease and its prevention, but with a positive program for teaching children the way to have good health and insuring the conditions that promote healthful living. Preparation of children for healthful living in their occupations and homes, after they leave school, is part of the school's responsibility for health.

Cooperation with Community Agencies

The 1930 White House Conference on Child Health recommended that the school should cooperate with such agencies as the Public Health Service the Red Cross the county nursing service and other social welfare agencies which work in the community to safeguard the health of children. Not only can such a program benefit the child in school but through such joining of forces with community health agencies the school can promote more effectively the health of pre school children and youths beyond school age as well as of its pupils after school hours and during vacations.

Cooperation with the Home

The school can round out its health education program by making parents alert to children's health needs and by explaining to parents the importance and use of health facilities in the community. All efforts of the school in behalf of children may be unavailing unless the home is acquainted with the purposes of the school health program and is able to maintain good health standards. Often there is a direct carryover of health teaching into the home and the parents are reached through the children.

Healthful Living

The first objective of health education should be to make healthful living an integral phase of school life. The program should be based on the actual needs of the children discovered by a study of their health status and the homes from which they come. Children can be shown how to live more healthfully by actual practice at school in better health habits including proper care of the teeth hair and clothing bodily cleanliness proper diet and accident prevention.

Good health can be maintained by providing in the school plant such hygienic features as ample facilities for cleanliness a place for serving balanced lunches proper lighting and air conditioning and adequate safety devices. Children should be taught to protect themselves through fire and safety drills. A program of sports and recreation alternating with periods of study can make a further contribution to improving the health of all the pupils.

Health Services

Another way in which the school can protect and improve the health of children is through health services. In most of the larger

schools, medical and nursing personnel are employed to supervise the health program and to render first aid in emergencies. Periodic physical examinations are followed by conferences between doctor, nurse, and teacher. A modified program is usually worked out for the child who is below par.

The larger schools usually provide corrective classes or make special arrangements in regular classes for the physically handicapped—those with defects in hearing, vision, or speech, those who are crippled and those who are cardiac cases. Improved health office records and reports can contribute to more effective health service and provide links with school, home, and community in matters affecting children's physical welfare. Health services are most effective when they are combined with health instruction in the classroom.

Health Instruction

A third way in which the school can safeguard child health is through instruction which will lead to better knowledge of health practices and the establishment of good health habits. Through the instructional program children can learn about the proper care of the body, good nutrition, other habits that help maintain good health, and community provisions for sanitation and disease prevention. One objective of health instruction should be to teach children to avoid fads and morbid concern about their physical condition.

Health Instruction in the Unified Program.—Teaching health as a set of textbook terms or rules to memorize represents an artificial approach to health education. Furthermore, teaching health as a separate subject in an already overcrowded schedule tends toward superficiality and seldom causes children to apply what they have learned to their daily living.

There is no other topic in the curriculum that fits better into a program of unified teaching and learning through experiences because health permeates every phase of daily life. The topic of health can be integrated successfully with the study of problems in the social studies, science, physical training and household arts. Unified teaching answers the question of how to find time in the schedule for health instruction. Furthermore unified teaching offers greater opportunity for effective learning in the areas of health and hygiene than does isolated subject teaching that follows a formal outline of textbook topics. In unified teaching, pupils and teacher together take up health problems as they arise instead of waiting for the topics to appear in a formal course. Teachers and pupils plan and develop the units

cooperatively. The freer daily schedule provides the longer periods of time needed for a thorough study of health topics and for practice in healthful living at school.

The unified program also contributes to child health by providing a well balanced school day with alternate periods for study, activity, recreation, and rest, by supplying satisfying outlets for nervous energy, by reducing nervous tension, and by avoiding enforced sedentary work. The newer methods also give teachers more chance to observe children's health needs and to work with children individually on their health problems.

The health program in one school was initiated by weighing and measuring all the children. In all grades the relation between health and growth was emphasized. In the primary grades, children learned about the relation of food to growth. The first grade ran a 'health store'. When children contributed articles for sale, the class decided whether the edible articles were healthful. In connection with this store project the children learned about the foods that would make a good breakfast or lunch by planning balanced menus. They learned that whether they would be well or sick depended partly on what they ate and partly on how they cared for their bodies.

Children in the higher grades considered the factors determining physical growth, the foods that would build strong bones and give strength to the muscles, and the relation of vitamins to health. The sixth grade 'broadcast' a program entitled "Building Strong Bodies". The interest they had developed in foods led the children to the cooking of a nutritious dinner at school. Menus were worked out and the best were chosen by vote of the class.

Throughout the school, children learned about hygienic care of their bodies. Principles of cleanliness and sanitation were studied. Proper care of the teeth was emphasized. The matter of posture was discussed, interest in this topic being stimulated by shadowgraphs which were made of each child. The children took pride in working for improved posture and in earning a good posture rating. Children in the upper grades studied first aid. One group made a large decorative wall chart with colorful pictures of foods demonstrating how to choose a well-balanced meal. This chart was hung over the food counter in the school lunchroom. Health principles were taught through talks, stories and pictures, games, slogans, charts, posters and cartoons.

A group of seventh graders, in connection with nutrition work, wanted to know how fast boys and girls grow from birth to maturity. They decided to measure some little children and themselves.

Though they had never heard of data, evidence, or scientific measurement, they were guided by the teacher to sources of accurate information and the children themselves copied the graphs and tables which were used when they presented their report on physical growth to the class. In weighing and measuring themselves and computing class averages they solved some real arithmetic problems.

Children in a northern state where the temperature in winter is severe were taught at school how to repair their cracked shoes. At the same time, there was considerable indirect learning about the danger to health of overexposure and wet feet.

Upper grade and high school students can begin the study of community health and social health problems through projects that will acquaint them with the sanitary measures and health safeguards provided by their own community.

Additional examples of units that may contribute to health instruction will be found in Chapter 6.

Foods, Nutrition, and Health

A Gallup Poll taken throughout the country revealed that half the adult population does not know there is a relation between health and diet. Although many people say they lack sufficient money to buy better and more food, the fact is, in almost all cases, that they do not know how to spend wisely the money they have. Even in well-to-do families inadequate diet is a constantly recurring problem, but the more limited the funds for the food budget are, the more acute this problem becomes. The choice and preparation of foods is a central problem in daily living, and can make the difference between sickness and health. For example, a positive correlation has been found between eating a nutritious breakfast and maintenance of good health.

In view of these facts, the study of foods and nutrition belongs in every school curriculum from the primary grades onward. The topic can be handled in several ways. One way is through curriculum units centering about food study. The food units referred to in Chapters 6 and 7 reflect direct results in improved child health because the new learnings were achieved by both the children and their parents. In other schools, such projects as growing a vegetable garden have yielded dividends in improved health. A farm, milk, or grain unit may be developed as a health project, giving pupils new insight into the value of foods for health.

One fifth grade studied the importance of vitamins, not by reading about them, but by comparing the growth of two guinea pigs, one of

which had had a well balanced diet and the other a diet deficient in vitamins. A child whose diet was known to be the poorest even though he came from a well-to-do family was charged with the responsibility of weighing the animals. He had been indifferent to all discussion of diet until one day after a few weeks' experience he remarked referring to the two pigs: "Gee this one's almost too heavy to lift. That other one's skinny and ugly. I guess the difference is in what they eat." The class charted the growth of the two animals for a month. At the same time they studied the types of foods containing vitamins essential to healthy growth.

Another way in which children can learn about foods and nutrition is through experiments in preparing foods to eat. Teaching children cooking does not begin and end with preparing a meal but reaches out into health and science. The interest in preparing foods to eat is a strongly motivating factor in studying cooking but the objective should be far broader than learning how to prepare food. As part of their instruction in cooking children should learn about a balanced diet, the vitamins essential to health, the chemical properties of foods and the caloric requirements of the body.

Attacking nutritional problems through studies organized in the school has proved beneficial in improving nutrition throughout the community. In one case families started home gardens and poultry projects, home canning of foods increased and parents sought the aid of the school in planning more nutritious meals within their income—all as a result of children's nutrition studies at school (23).

The School Cafeteria Contributes to Health Education—Serving a midday meal to children at school is becoming a general practice in many communities. This lunch period can become a truly educative experience that will improve children's health if instruction in nutrition is correlated with the lunch experience. Lunch time lessons may include selection of foods, cleanliness, overcoming food prejudices, clearing one's plate, appreciation of food costs and good manners in the lunchroom. Through the cafeteria pupils begin to learn about the economics of production. For further discussion of related objectives approachable through school lunch projects see reference 23.

The school lunch project also can give pupils experience in citizenship through participating in group planning and in leadership through serving as managers.

Classroom activities can be related to the cafeteria project through studies in health, hygiene and physiology, home economics and consumer problems, gardening and agriculture and the skill subjects.

The help of the community may be enlisted by inviting parents to serve on the cafeteria committee, sending home copies of school menus, and giving the school lunch plan local publicity

Elsie Mabee (11) has described a project in which a 5th grade planned and carried on a hot lunch project. In this project the pupils grew vegetables in the school garden, selected foods, and planned the meals. This study contains a good bibliography on the subject.

Serving well balanced school lunches has many values. Not only do the lunches teach health habits, but they give the children the energy needed for afternoon work in school, reduce the tendency toward colds and illnesses, tend to improve physical condition in general, save the fatigue induced by a quick trip home at noontime, and allow more time for rest and recreation at school.

Physical Fitness

The modern school provides conditions that improve physical fitness and, at the same time, instruct children in the principles that contribute to physical well being. Aspects of physical fitness to which the school gives attention are rest and relaxation, selection of food, avoidance of eyestrain, development of bodily power and strength, learning motor skills, and acquiring poise.

Today, in classrooms where the activity program is in vogue, there is little need for formal gymnastic drill. The entire day's activities provide informally for relaxation of muscles, for relief from fatigue, and for building coordination and balance. Supervised sports and games contribute more to physical fitness, experts believe, than formal gymnastic drill.

The recreational program should be a part of the school day. Children should have from three to five hours of physical exercise daily. Exercise is more valuable in the open air than indoors and most valuable in the sunshine. Sports and games can have added value as a means of promoting social development. They can be mentally stimulating as well as physically invigorating because they use free time in wholesome ways and contribute to character development.

Strange as it may seem to an adult, a child actually enjoys the exhilarating feeling he derives from hanging upside down with his feet through rings suspended from the gymnasium bar and swinging vigorously. "Gym" or "recreation" should become the favorite period in the day. Everyone except the physically disabled should participate in sports. Activities that promote physical fitness include games, rhythms, relay races, and athletic stunts.

Safety and First Aid

First aid is an important topic. Every person who works with children should have skill in administering first aid. A group of elementary children in one school who had been given some training in this skill were able to assist in caring for a child in the group who was knocked unconscious by a fall during a play period.

Children in the first three grades need practical lessons in safety because many of them go to and from school or about the community unaccompanied. Many have not learned caution and do not sense dangers that traffic conditions hold for them.

Included in safety education should be the correct behavior in fire drills, the proper procedure in crossing streets, and the need for observing traffic signals. Safety can also be furthered by supervision on playgrounds and at bus loadings, daily building inspection, and adequate policing of crossings. The children can learn about safety through demonstrations, pictures, posters, and class discussions.

Although the school should never relax its vigilance in safeguarding child health, the less it says to children about their own ill health, the better. Health instruction should not be given in such a way that it makes children supersensitive to health conditions or morbidly concerned about physical deficiencies. Furthermore, not every slight deviation from health standards should be considered an abnormal condition.

QUESTIONS AND TOPICS FOR STUDY

1. List several ways in which the modern school program can contribute to better health for children.
2. List some of the concepts pupils should gain from their studies in health.
3. What is the responsibility of teachers for pupil health?
4. How can such a project as a school garden or cafeteria contribute to better child hygiene?
5. What is the responsibility of the school in instructing parents in matters of child hygiene?
6. How much responsibility can school children be expected to take in matters of healthful living?
7. Outline the health program for a school. Indicate the size and type of school.
8. Describe a health unit for the first grade, Fourth grade, Eighth grade.
9. Outline a school health bulletin for teachers and pupils. For parents.
10. Write five additional questions or topics for discussion based on this chapter.

REFERENCES

- 1 Betzner, Jean, ed. *Healthful Living for Children* Washington Association for Childhood Education 1944
- 2 Brock, George D. *Health Through Projects* New York A S Barnes & Co., Inc., 1931
- 3 Dobbs, Alma. *Teaching Wholesome Living in the Elementary School* New York A S Barnes & Co., Inc., 1939
- 4 Grout, Ruth E. *A Handbook of Health Education A Guide for Teachers in Rural Schools* New York Doubleday & Co., Inc 1936
- 5 Heimers, Lili. *Health Education for All Ages* Bulletin of the Montclair State Teachers College, Montclair, N J 1944
- 6 Hoar, Franklin B. "A Compilation of Visual Aids for Health and Physical Education" *Journal of Health and Physical Education*, 1932, 54, 39-45
- 7 Jacks, Lawrence P. *Education Through Recreation* New York Harper & Bros., 1932
- 8 Langton, Clair V. *Orientation in School Health* New York Harper & Bros 1941
- 9 Irwin, Leshe W. *The Curriculum in Health and Physical Expression* St. Louis Mo The C V Mosby Co. 1944
- 10 LaSalle, Dorothy. *Physical Education for the Classroom Teacher* New York A S Barnes & Co., Inc., 1937
- 11 Mabee, Elsie. *Young Nutritionists in Action* Teachers Lesson Unit Series No 103 New York Bureau of Publications, Teachers College, Columbia University, 1942
- 12 Neilson, N P and Van Hagen, W. *Manual of Physical Education Activities for Elementary Schools* Sacramento California State Printing Office, 1930
- 13 Patty, Willard W. *Teaching Health and Safety in the Elementary Grades* New York Prentice Hall Inc., 1940
- 14 Rogers J F. *What Every Teacher Should Know about the Physical Condition of Her Pupils* Pamphlet No 68 Washington U S Office of Education, 1936
- 15 Salt, Ellis B et al. *Teaching Physical Education in the Elementary School* New York A S Barnes & Co., Inc., 1942
- 16 Strang, Ruth and Smiley, Dean F. *The Role of the Teacher in Health Education* The Macmillan Co, 1941
- 17 Turner, C E. *Principles of Health Education* Boston D C. Heath & Co 1939
- 18 Walker, Watson F and Randolph, Carolina R. *School Health Services a Study of the Programs Developed by the Health Department in Six Tennessee Counties* New York Commonwealth Fund 1941
- 19 Whitney, Albert W and Schieb, Ida E. 'Safety Education in the Modern School Program.' *Baltimore Bulletin of Education*, 1937, 15, 1 6
- 20 Williams, Jesse F and Shaw, Fannie B. *Methods and Materials in Health Education* New York The Ronald Press Co 1935
- 21 Winslow, C-E A. *The School Health Program* New York McGraw-Hill Book Co Inc, 1938
- 22 *Course of Study for Virginia Elementary Schools Grades I-VII* Richmond State Department of Public Instruction 1943
- 23 *Health Education* Revised ed Washington National Education Association, 1941
- 24 *Health in the Schools* Twentieth Yearbook of the American Association of School Administrators Washington National Education Association, 1942
- 25 *Making School Lunches Educational* Nutrition Education Series, Pamphlet No 2 Washington U S Office of Education, 1944

Chapter 19

THE COMMUNITY CENTERED SCHOOL

The school that educates in the truest sense of the word becomes a force in the community it serves entering into partnership with all other welfare agencies and helping to mobilize human and natural resources to lift the level of knowledge health and culture. Since the school is owned and operated by the community it is logical to assume that the school should minister to social needs of the community.

The conventional public school has maintained an isolated position as a learning center for children overlooking its larger role as an influence in community life and failing to give children a true understanding of the life about them. The school that confines its efforts to teaching textbook abstractions overlooks the more meaningful educative experiences to be derived from contacts with community life. Many leaders today believe that the school's unique functions are best achieved within the framework of the local community.

World War II tended to accelerate the transition from an academic to a community centered concept of education and forced many schools to reorganize their programs overnight in the interests of community welfare. The stand-offish school threw open its door to the public which was forced to go to school if only to obtain a ration book. The war caused school home and community agencies to pool their resources and to unite their energies for the common good.

The new education demands that children learn the lessons their environment has to teach through participation in the life of the community and through firsthand contacts with commerce business and local industries. Education under these conditions furnishes a realistic apprenticeship to life for boys and girls who as a result of this training can later in life discharge more intelligently their obligations as adults.

The community centered concept of education need not be restricted to underprivileged groups or to remote rural districts where there are few cultural advantages. The well-to-do urban neighbor

hood needs the school's services for broadening the children's understanding of life about them, for knitting together the interests of diverse groups so that more effectual educational work can be done, and for utilizing all the facilities the community has to offer to benefit children and adults.

The community centered school has an advantage over the school that stands aloof from public contacts because, through its activity in local affairs, the public can gain a better understanding of its purposes and will usually support them wholeheartedly. The school that sets up as one of its aims the cultivating of better school-home-community understanding will be more likely to gain the cooperation it needs to attain its goals. The school which is concerned about what it can do for the community will usually find that the community in turn supports the school.

Education Adapted to Local Needs.—The community centered school tends to adapt its program to local needs. Local resources, traditions and institutions play a large part in determining what shall be taught. Instead of adopting a carbon copy of some program that has been highly successful elsewhere, the school tends to develop the program that best fits the particular community. Iron-clad centralized controls that enforce narrow conformity are giving way to local option in matters that concern the school's broader functioning in its own locality.

Planning for Community Schools.—Planning for community schools should be based upon local surveys to determine the educational resources and requirements of the region served by the school. From these findings, plans can be made for a long-term community education program which will achieve the objectives of the planning group. Several recent experiments in community education in America have followed this practice (7, 38, 57). The schools already in existence participate in the preliminary surveys and serve as the foundation for new developments. Broadening education to include community relations requires the cooperation of all agencies concerned with local welfare.

By virtue of their position, the members of the teaching and administrative staff of the local school should assume leadership in establishing school-community service. The community school may fail in its purpose unless the teachers themselves become leaders among the thinking members of the community. This is particularly true in rural areas where there may be few persons who possess the teachers' insight and leadership. *Here the school executive must cease to be*

merely an academic principal or superintendent, he must make his influence count for civic betterment

How the School Should Function in the Community

An analysis of reports from schools functioning as social agencies in their communities indicates that there are at least seven different ways in which school and community can work cooperatively in education

- 1 *The school can identify itself with life in the community*, participating in local affairs cooperating with all other social and educational agencies in improving the quality of living, and serving to coordinate child welfare and community betterment
- 2 *The school can identify itself with the homes* from which the children come extending its educational program to include members of their families, and keeping in close touch with all the school patrons
- 3 *The school can make the children aware of community problems*
They can be encouraged to raise questions about local affairs and can be helped to understand the community in which they live including the various features that make up life around them—the resources that contribute to a good life, and the disintegrating factors that beset community life
- 4 *The school can utilize all community resources that have educational value* for children and the features of the local environment that can enrich a child's background These resources include local library educational features of the local industries and business establishments museums, parks landmarks, historical centers, governmental agencies, and natural resources of the region
- 5 *The school can teach children to become good citizens* by helping them participate in the life and work of the community under school supervision Community problems can be brought into the classroom where children can be given an opportunity to deliberate the issues involved or children can go out into their community to study these issues under the school's direction
- 6 *The school can extend its supervision over the children in their after school recreational hours* so that these hours are constructively spent and the children protected from influences that might lead to undesirable behavior
- 7 *The school can serve the adults in the community*, as an educational and social center where classes are held and opportunities for meetings or recreation are provided

The School Serves the Community

As far back as the seventeenth century, Comenius pointed out that social conditions could be improved through education. One test of a school's worth is found in what happens to the community in which the school is located, for the school that truly belongs to the community contributes extensively to social welfare.

The school can work in two directions to achieve this objective: first, it can serve as an agency to promote community welfare, operating through the parents and children; second, it can invite community agencies to cooperate in making all welfare resources accessible to the whole community.

A council composed of pupils, teachers, administrators, parents, and representatives of community agencies should plan and direct the use of resources suitable for educational purposes. These include libraries, churches, civic organizations, the Red Cross, the Boy Scouts, the Girl Scouts, other youth clubs, the community nursing service, and committees for charity, for the prevention of juvenile delinquency, or for health and hygiene. In rural areas these may include in addition home demonstration and agricultural specialists and farm security agents. Other resources are public-spirited citizens who put the welfare of the community ahead of their own private concerns.

An excellent example is the community education developed by the Tennessee Valley Authority to improve and sustain the productivity of the region and to enable the population to make adjustments to the new conditions created by increased electrical power and new recreational facilities. Norris, Tennessee, which has been in a unique position to experiment with a community program, has developed a year-round program with the schools serving as the center of educational activity for both children and adults. The school operates as a working base for welfare and social activities of the town and neighboring region. A recent report describes the community, outlines the scope of the program, and indicates the concept of education that prevails in Norris (24). Vital concerns of everyone, such as health, safety, housing conditions, recreation, and occupations have become basic problems for the school.

A description of the community activities of the Wilson Dam and Gilbertsville Schools in the TVA project has been given by Seay (38). In other states where the cultural and economic level is low, constructive programs are being planned which will utilize all avail-

able educational resources In one state where conditions are predominantly rural a drive has been started toward "Education for Better Living" Emphasis in the schools of this state is being shifted from the conventional subjects' to nutrition health home making, gardening, and forestry, with all the school work adapted to each local community

Elsie Clapp has described the benefits to the community resulting when such institutions as the Ballard Memorial School in Kentucky and the Arthurdale School in West Virginia were established as community projects (7)

Schools contributed to community welfare during the war by helping to maintain civilian morale, supporting youth organizations and promoting consumer education health recreation safety, and community feeding Schools can now contribute to family welfare through their provisions for child adjustment physical welfare health improvement, nutrition, housing, and consumer education

Cooperation with Local Agencies

The community centered school is concerned with all local influences that affect the welfare of the children and youth of the region The chief educative influences affecting a child's habits and character reside more commonly in the child's out of school surroundings than in the school itself In many localities these influences are deleterious and educative only in a negative sense The school cannot attempt to cope with all these influences single handed but believing that 'in union there is strength' it should cooperate with other social and recreational agencies in promoting public welfare The school should assume the leadership in this endeavor and help coordinate the work of all existing agencies for more effective service

In some localities the school works with other local organizations to establish a community council with representatives from local service clubs, lodges, health agencies, religious institutions, civic groups, and governmental agencies

The Eleventh Yearbook of the National Elementary Principals Association, *The Principal and His Community* describes educational programs in various communities that utilize the services of such organizations as the Rotary Club, the Women's Club the Children's Aid Society, the Board of Health and the juvenile courts in ministering to local needs A survey of cities in Michigan reported in the Yearbook showed that throughout the state organizations cooperating with the schools included the P-T A, the Red Cross Boy Scouts,

Girl Scouts, service clubs, women's civic clubs, church and Sunday schools, veterans' organizations, good government clubs, the Library Board, the City Beautification Committee, mothers' study clubs, the Y M C A and Y W C A , and ladies' literary clubs

Seay reported that the community resources used by the Gilbertsville School, located in rural surroundings, were N Y A and W P A , the state teachers college, the state university, the county agent, the county health department, the Women's Club, the T V A 's recreational health, and technological resources, and local collections and exhibits

The Norris, Tennessee, schools utilized the Red Cross, the P T A , the American Legion and Auxiliary, the State Department of Public Welfare, the County Tuberculosis Association, the Save the-Child Fund, the County Health Department, the Infantile Paralysis Fund

The concerted attack on community problems with the school in a position of leadership has served in some instances to improve moving picture programs, to solve community health problems, to establish juvenile recreational clubs, to give improved vocational guidance, to improve nutrition, to establish better traffic regulations and require their enforcement, and to contribute to city beautification and improvement in sanitation

Home Contacts

Education in the classroom represents only a small fraction of the total training a child receives. It is estimated that of the 8,760 hours in a year, the child spends only about 1,000 in school, during the rest of those hours he is under home supervision

The community centered concept of education requires that the school, the appropriate community agencies, and the homes represented in the school population cooperate to insure the welfare of every family with children of school or preschool age. This family social service feature should be part of a planned community program, not something left to incidental contacts between school and home when busy teachers and administrators can spare the time. It has been observed that the most successful community programs are those that include the parents. Methods for establishing closer relationships between school and home are discussed more fully in Chapter 21 where references on this topic will be found

Children Learn About Their Community

Children who study in a community centered school where they can learn about social processes at work locally have a decided advan-

tage over children attending the traditional school who gain their impressions of their community only through casual out-of school contacts, which tend to form limited erroneous, or biased impressions. Without educational guidance a child may remain ignorant of the best features of his community life, or he may fail to interpret intelligently the life that goes on about him. Learning about the community through school activities helps to extend the children's mental horizons their experience broadens, their understanding widens, and they become sensitized to community problems. They have a better chance of finding answers to their questions about life in their local environment.

Some years ago pupils attending a conventional school in a middle western industrial community learned about civic virtues and responsibilities by reading the prescribed text, but learned nothing about the local stamping mill (one of the nation's largest), or about its products, working conditions, organization, or relation to the life of the community. The children spent many hours learning about life in ancient Greece and about how a citizen conducted himself in that far-off time, yet these were the very children who within a few years would be working in the local mill and discharging the duties of citizenship in the very shadow of the school. Sometimes the younger children asked what a stamping mill was for, but even their teacher could not give a clear answer. In the city lived and worked one of the country's leading labor agitators, but his name and the principles he stood for were never mentioned in the schools. Such a thing as taking an afternoon off from school so that children could visit the mill, some other plant, or a spot of historic interest was unheard of.

The school building had a tower. Occasionally small groups of pupils were taken up to the tower for a glimpse of the city, but to the children the school and the community in which it was located still seemed to be two distinct worlds.

Today, older students can develop civic consciousness through studying community affairs as part of the school curriculum. In one town, school children proved to be far better informed than their parents about public utilities after they had undertaken their own investigation of the matter as a class project.

Too often in the past teachers, like other citizens, have lacked the background for understanding community problems. Today, teachers are rapidly learning about civic affairs. No teacher can be considered qualified for his job if he does not take sufficient interest in his community to inform himself about local affairs.

The Community as a Laboratory for the Social Studies

The modern school uses the local environment as a laboratory for the social studies, a laboratory in which school children can develop greater social consciousness, become acquainted with their neighbors, and learn about civic institutions by actually investigating them. They can gain background for the study of economics by studying the shops, the banking houses, the post office, and other civic institutions. The pupils may develop concern for community welfare by learning how the people in their town or city live and by exploring many different aspects of community life.

The older children can study other communities in addition to their own. Rural children may go to the city: city children may visit the country. Children from well-to-do homes can learn about those who are less fortunate.

Through studying many phases of community life children usually become conscious of manners and customs, and they learn how traditions become the mores of the people.

Studying the community and its institutions has a timeliness, an "up-to-dateness," that conventional school studies often lack. Furthermore, community centered themes demand a wide-awake approach by the pupil; they tend to sharpen the child's ability to observe and to challenge his ability to think, to compare, and to draw conclusions for himself.

Among the many advantages which may be derived by the child from the community centered school is the opportunity to learn through experiences and through dealing with actual materials. Using the community as an educational workshop gives meaning and purpose to education; learning becomes realistic and practical. Growing awareness of community problems usually leads pupils to inquire about the larger world of which their own community is only a part.

Timely Topics

The community centered school reserves time in the classroom for discussion of community affairs and for other activities that deepen the pupil's knowledge of his local environment.

Even children in the kindergarten and first grade are not too young to begin learning about their community. Children in the primary grades, after taking excursions into the community, can relive in their classrooms the life they have seen. They may build a play city and dramatize the life about them. Teachers have discovered that the

benefits school children gain from community study are most fully achieved when the projects are related to concerns appropriate to their age

Elsie Clapp tells how in one school the first grade studied *Farming on the Homestead* and the second grade *Building the Village of Arthurdale* their own community. Community studies carried on by the second grade have been described by Avah Hughes (21). Lulu Wright tells how a first grade left the classroom to gain first hand knowledge of the great city in which they lived (44). Primary children at the Little Red Schoolhouse New York learn about the services of city policemen firemen and the sanitation department and how these services contribute to their well being (12).

The brief descriptions of units in Chapter 7 illustrate various ways in which the modern school helps elementary school children learn about local affairs.

In Glencoe Illinois school children participated in excursions to centers of community activity. They sponsored bird sanctuaries and many other local improvements. Older pupils studied community origins.

James Tippet has described the ways in which the Parker School District in South Carolina develops in children a wide awake interest in community life (42). The children's surroundings gain new meaning when they take excursions about the region as part of their school studies. They are usually eager to learn more about their community to explore for themselves and to discuss what they discover.

Two boys in the Parker District noticed the marble works near their school. They talked with the workmen and watched their work. The class took a trip to the works which were within walking distance of the school. Soon all the children had become better informed about this local industry.

Upper Grades

The upper grades can make wider use of community resources interrelating in many ways the work of classroom and environment. They can study local industries and institutions evaluating what they observe. They may institute a safety campaign study city government or learn about pioneer days in the community. They may carry on a unit such as 'Life Today and Yesterday in Our Town'. The study may be broadened to include Our State. Pupils

may study the laws that govern the community, or learn about labor or housing in their locality

A fourth grade unit in Warren County, New Jersey, centers about "Studying Our County" The pupils make illustrative maps and charts as part of this unit

Teen age children at the Little Red Schoolhouse, New York City, made a study of how the earth and geographical factors influence people's lives They took a trip to New Jersey, observing two sections lying side by side, one an area with rich soil and bumper crops, the other a sandy waste despoiled of its timber They read several books on this region in preparation for the trip They went to the tops of the high hills, to the rivers, and to the canals in the region, and visited a cooperative housing community, a cooperative chicken farm, and a dairy They stopped at a potato farm and talked with the government inspector of potatoes On the next day they visited the pine barrens, the cranberry bogs, and ghost towns long since fallen into decay They took movies and snapshots and carried back to school material for discussion that lasted through the term

Senior high school students can go even farther afield in community studies In the spring of 1938 a group of eleventh grade pupils from New York City visited a community in the coal fields of West Virginia to study this phase of American life at close range As a result, they became more sensitive to community problems and learned to think and talk critically about them Later in the season students from this West Virginia community visited New York to learn at first hand about life in a great city

Sociological Studies

The older children can delve into sociological problems They can study race relations, the color line, the place of the Negro in a white world and the United States as a cultural melting pot They can study the immigrant and the refugee, not solely to develop tolerance, but to appreciate what people of different backgrounds have to contribute to American life

Norman Studer tells how the eighth grade in a New York City school studied a foreign community in their neighborhood The pupils visited the grocery stores, shops, settlement houses libraries, churches and homes They met and talked with representatives of the foreign group Afterwards they organized and presented their observations in the form of written reports These students also ob-

served local government in action by visiting the local civic offices and learning about the functions carried on there

Community service was made the focus of the revised educational program developed at the Wells High School, Chicago (30). The studies carried on by pupils in this school situated in an underprivileged neighborhood had been found to be remote from any real service to the pupils or the community in which they lived. A survey was first made to determine the basic social structure of the neighborhood and to determine basic needs. It was found that health standards were low, and that the families lacked the necessary knowledge and the proper attitude to improve health conditions. Foreign languages were spoken in many homes, the residents did little reading, community influences were largely undesirable, and recreational facilities were limited.

As a result of this survey, two new topics were introduced in the school program—home and community living and the metropolitan community. The classrooms became active workshops. Individual and group study was substituted for conventional recitations. The activities of school and community were coordinated. A folder was prepared for distribution to students indicating what the community had to offer in the way of athletics, sports, dramatics, and health care. Students were encouraged to take advantage of these facilities. The school Civic Association sponsored a neighborhood clean up campaign.

A ninth grade class in another school made a study of the peoples that make up America and in particular the community in which the school was located. Residents of the neighborhood of the school included an unusual variety of races, cultures, creeds, and social conditions. The students outlined a working policy to be carried out in conjunction with the local settlement houses and churches. The class ended its study by presenting an assembly program called "Know Your Neighbors."

In other studies of community life, older students have heard a local judge discuss truancy, delinquency, and crime in the city; they have investigated sanitary conditions in the community, infant mortality, and population trends, and they have learned about the natural resources of the community and how science has utilized these resources to improve local living conditions.

Educational Resources in the Local Environment

The foregoing section has suggested many ways in which the community can become a laboratory in social science for the modern

school There are many resources in every community that can be used to enrich children's learning experiences at school These resources are to be found everywhere, but they are often considered too commonplace to have instructional value Teachers in rural areas have sometimes lamented the lack of such municipal instructional materials as museums, libraries, exhibits, and other similar study resources of the great city Actually, there may be more study material of educational value in a rural community where nature is closer at hand and can be more easily observed, than in a great city with all its archives It is doubtful whether the dead specimens in the great museums have more educational significance for children than the pulsating life of the real world about them In the midst of plenty, children may be starved intellectually because of the failure of their instructors to draw on these rich resources that seem so commonplace

One educator relates that during his childhood, which was spent in the Great Plains region, he and his schoolmates studied the New England Indians from textbooks, though the boys carried in their pockets arrow heads they uncovered in their own fields They studied about Boone's exploits in Kentucky, but not the trappers, hunters, and explorers of their own region

What are some of the resources that an average community can offer to supplement textbook learning at school? First, there is always nature study material the rushing stream, the awakening spring, or the changing seasons There are animals to observe, perhaps in a wild state or perhaps at a zoo There is scientific information to be gained from the local industrial plants and the machine shops There are industrial plants which convert raw materials into finished products There may be a brick kiln, a gas plant, a bottling works, a canning factory, an orchard, a dairy, a farm, or a mine. *Through observing the processes carried on in these industries, children can learn how food stuffs are produced and how everyday materials and equipment are manufactured*

Among the community resources utilized for curriculum projects at the P. K. Yonge School in Florida (49) were

A bakery and its services

Railroad ticket offices, waiting rooms, freight offices, and warehouses

A farm dairy, greenhouses, and gardens operated by the local state university

A chicken hatchery

A laundry and dry cleaning business

A plant for distilling products from Florida pines

A radio station
An art museum
Red Cross headquarters

The use of the community in connection with this school's activities includes taking trips to places of interest, bringing local products into the classroom hearing addresses by community leaders and competent persons in many fields, and experimenting in the classroom with local resources. Upper grade pupils study the tung oil industry, the lumbering industry, the naval stores, the turpentine industry, the moss factory, the chemical company, or the city newspaper plant.

The community also offers opportunities for the development of the children's cultural appreciations. In the Speyer School, New York City, children studied Chinese culture because they had developed an interest in the subject from having a Chinese child in their midst. They drew upon all the resources of New York City that had a bearing on this study by making visits to Chinatown, studying Chinese art objects in the museums, learning about Chinese household customs, and hearing Chinese leaders describe life in their native land.

Children in a sixth grade in an experimental school in New York City used the local environment to good advantage in their study of ancient and modern architecture (1). They visited the Metropolitan Museum of Art to note details of ancient temples and medieval church architecture, the Tiffany studios to study stained glass windows, and the Riverside Church to study Gothic architecture. They took a boat trip around Manhattan Island to get an over all view of the many phases of architecture that the New York skyline presents.

There is scarcely a school subject area or a study unit that cannot be enlivened and enriched by drawing upon local materials that are available at little expense.

Utilizing Local Talent

In most communities there are citizens who have had interesting experiences they are willing to share with the children or who have developed an interest, a specialty, or a skill that would add much to the cultural background of the average child.

In one school a Korean father taught the children of his boy's class how to add and subtract with the abacus. A mother who had journeyed to Mexico lent her collection of souvenirs to the school and participated in an assembly on Mexico. An aunt of one of the children displayed her flower paintings. A specialist in marine life

brought his collection of shells to exhibit and explain to the children. An old resident related true stories of pioneer life in the town, displaying the equipment he had used on the prairie in years gone by. Another brought his guitar and sang cowboy songs. Still another told Uncle Remus stories. The younger children usually enjoy visits from a postman, a fireman, a policeman, or a local celebrity.

The aviator, scientist, fisherman, traveler, musician, artist, wood worker, metal worker, photographer, blacksmith, farmer, flower garden expert, and the dog fancier are all persons who could add to the school child's cultural background.

Other resources having educational value that are usually available in urban communities are library collections, nature museums, art galleries, zoos, botanical gardens, fairs, and exhibits of all kinds. Guides to all these resources have been prepared for the use of the schools in some communities. In large cities the museums are usually equipped to send collections and exhibit materials to the schools.

The Local Excursion as an Educational Device

The excursion under school auspices can give children the community contacts they require for studying special phases of their locality, it can make possible the use of local resources that could not possibly be brought into the school, and it has the added advantage of taking children outside the classroom to learn through direct experience. The most successful excursions are those that are planned in advance, that direct the children's attention to specific objectives, and that result in *organized reports based on the pupils' observations*.

Using the educational resources of the community does not invariably require a trip to a plant or scenic point. This learning can be achieved in part through reading books, pamphlets, or the local papers; viewing moving pictures; or studying records that are brought into the classroom.

Additional suggestions for the use of the excursion as an instructional resource are given in Chapter 16.

The Need for Regional Source Materials

Gaining a complete understanding of the local scene usually requires written source materials. The school can use advantageously descriptions of the region, stories of local events, picture collections, or outlines of facts about the locality. In some cases the local library can supply this material directly to the children, or at least the source material from which mimeographed teaching materials can be pre-

pared The needed information is seldom to be found in sufficient quantity in school textbooks In some instances, teachers themselves, aided by children who have collected information pertinent to the topic, have developed study materials in conjunction with curriculum units

In some regions school children get information on better living through locally prepared reading materials Such booklets often supply information about food homes, clothing health and farming (6)

A good illustration of local reading material is the pamphlet *New Jersey—People, Resources and Industries of the Garden State*, written by J Russell Smith and published by the John C Winston Company, Philadelphia The Kansas City, Missouri schools are publishing a series of four books entitled *The Story of Kansas City* The school children of Lynn Massachusetts have cooperated in preparing a history and description of their city to be used as local study material in the schools A series of pamphlets dealing with problems of immediate concern to pupils which has been prepared by local school authorities is obtainable from West Georgia College Carrolton, Georgia Titles include *Let's Cook Lunch*, *Let's Plant Grass*, *Let's Raise Pigs*, *The Doctor Is Coming*, and *Out Under the Sky*

In Pike County, Alabama children who were given material to read based on familiar things in their environment learned to read more successfully than they ever had before Good results were also obtained from the use of local reading materials developed by Maurice Seay and his associates in Kentucky (38)

Learning Citizenship in the Community Centered School

The best preparation for adult participation in community life is active participation as junior citizens during the childhood and adolescent years Training in citizenship is not a new objective of the public schools but this objective is interpreted in the community centered school as learning to become a good citizen by learning about the duties of citizenship in the local community With this new interpretation, 'citizenship' ceases to be an abstraction from a textbook or a memorized set of rules for conduct Instead through experiences reaching out into the local region and through classroom activities relating to community problems, children are made to realize what being a good citizen means and are given practice in handling situations that will confront them as citizens in adult life In turn

they influence their elders so that in the end the entire community benefits.

Participating in Community Betterment.—When children have their eyes opened to opportunities for community service, they usually want to participate in efforts to improve life in their locality. In countless ways children and youth can serve the community and gain benefits for themselves that they could never gain from an equal amount of classroom instruction. Under expert educational guidance, children in some communities have helped to improve sanitary conditions and to control weeds and insect pests. They have participated in conservation projects such as a "Save the Birds" campaign. Young people of high school age have undertaken a community survey and made sociological maps preliminary to a community improvement program. Paul Hanna has described the ways in which high school students have contributed many real services to their communities (20).

Conservation offers exceptional opportunities for school children to serve the community. In Hamilton County, Tennessee, school children filled the gullies and helped plant trees to stop soil erosion. In Waycross, Georgia, they participated in "Protect the Toad Week." A description of this conservation project is given on page 162. During the war school children all over the country gathered milkweed pods to be used in lifesaving belts for the armed forces.

School children have helped to support the welfare organizations of their city as members of school and community clubs and through school publications.

Work Projects.—When the educational program reaches into the life of the community, school children can serve through work projects that contribute to the productiveness of the region. In every locality there is work to be done in which children still in school can participate.

The Norris, Tennessee, educational program, which stresses trade and agricultural training, and home planning and management, has included cooperation with the small industries and farm enterprises of the region. Children in Norris ran the Norris School Produce Company which was organized to raise and sell garden produce; they learned by hard practical experience how difficult it is to "keep out of the red."

In a large city high school there is an active community service club whose members work voluntarily on neighborhood improvement projects.

One Florida community under P. T. A. leadership set up a Town Betterment Club with the objective To help meet human needs in the community The school building and grounds became a center of community life Pupils teachers and parents participated in community service projects such as gardening and food canning Older boys assisted in pruning shade trees Athletic fields were laid out and picnic facilities were added to the school grounds Most of the residents in the community took a hand in the activities which contributed considerably to healthy living and incidentally to a reduction in the number of cases of truancy and juvenile delinquency

Education geared to meet the needs and interests of low income groups in various parts of the country has helped to improve their economic condition In several experiments the basic plan has been to teach essential facts about housing clothing and food to children through school projects with the expectation that this knowledge would reach the child's parents In one community the children working on a project of this type learned about gardening and canning School lunches were prepared from food the children raised in their gardens One group learned about the care of clothing another about raising goats

Several years ago Venezuela began to teach conservation of natural resources to all school children with the Department of Agriculture and the schools working jointly on the project Children have been taught to assist in reforestation and restoration of eroded areas

In other communities children have helped harvest potato and berry crops In Vermont they helped bring in the maple sap during a labor shortage In other localities they ran the community garden In wartime these services became indispensable in carrying on local industries The school often joined with the community in sponsoring Victory Gardens In one town the chemistry students in the local high school tested soils in preparation for a Victory Garden undertaken by school children The school year was frequently extended to eleven or twelve months so that these work projects could have educational supervision

Community service outside the school is sometimes added as an item on the student's report card

Community Trends in Rural Education

Progressive educators recognize the peculiar requirements of school children where the population is still largely rural or semirural With the present trend toward decentralization of cities the number

of these children is likely to increase. In the past there has been little differentiation in educational provisions for rural and urban children. Consequently, there has been a steady complaint that rural children are being educated for town life. Why not make more use of local material in educating these rural children?

Life in the Caribbean seems a more appropriate theme for children on a sugar plantation in Jamaica than "The Lights of London"; local industries would be a better study for children in a far-flung Canadian province than the manners and customs of the world's great but remote cities. Seacoast children may require something quite different from inland dwellers; mountain children, from lowlanders. Negroes, Eskimos, Indians, Puerto Ricans, and Filipinos, to mention only a few diverse groups, all need educational opportunities that do justice to their rich cultural heritage. Their arts and crafts and their ancient lore should be retained as the background for their education.

Some people in the world may need to know only enough about New York's harbor facilities to gain some conception of what the city means for world progress. To know one's own local bay and to understand the life of one's own region may suffice. Confining education to the local scene need not preclude introducing maturing children to the larger world and other cultures but it does insure that learning is based on the child's "apperceptive mass" of familiar situations and concepts.

The work of 4-H clubs suggests the pattern for rural children: making them farm conscious; teaching them how to raise poultry and sheep; how to test and analyze soils and how to plant and care for trees and berry bushes; reviving the old crafts; and giving them experiences in gardening and cooking. The teachers must have a love of the land and should not be so "city wise" that they establish a town bias for the children. It is agreed that city schools enrolling country children must also give more consideration to these matters because the rural life may hold a richer store of values and meanings for education than the urban pattern of living.

The rural school can become a community center, the focal point for local improvements, providing a background for democratic living, creating community interest in the school, and developing resources for vocations, education, and recreation.

Community Guidance in Leisure Time

Another phase of community school cooperation is found in the extension of school supervision over the child's after school hours.

A child's education does not stop at three P. M. Leisure time holds as many educational possibilities for the child or youth as his hours in school. Educational authorities in progressive communities believe that since all out of school experiences are educational for better or for worse the school has not only a right but a duty to supervise the child's free hours especially the hours from three to six when working mothers are not at home. In this enterprise the school meets severe competition from the movies the gangs the backyards the candy stores and various street influences.

By providing club groups and recreational facilities as a haven during the after school hours the school not only can protect children from unfavorable influences but can extend their education in positive ways. Pupils should be told at school what their neighborhood provides in sports recreation clubs and activities. School authorities should cooperate with the local theaters in improving the motion picture programs. They should enlist the cooperation of community leaders in supplying materials and funds for recreation.

Adelle Franklin and Agnes Benedict have described after school play centers for children operated in conjunction with all day neighborhood schools in New York City (16). A play center at school after school hours keeps children off busy streets and supplies a recreational program that is richer in activities than most homes afford. There is the added advantage of trained adult supervision.

Children usually delight in clubs that offer such interests as games carpentry, dramatics or arts and crafts. These after school clubs can promote health as well as personal growth.

In one enterprising city the school system has taken over the supervision of all community recreation during the afternoon and evening including the program for both children and adults whether conducted on the school grounds or elsewhere. In this way the community is assured of expert professional service in recreation which can be extended to the youngsters after school hours.

Another new departure in education is the establishment of school operated farms and camps to improve the children's physical fitness to provide realistic experiences to broaden community contacts and to train pupils in useful skills.

One city school system in the Middle West owns and operates a farm to which groups of 30 to 40 elementary school children are taken for half a day each week from May to October. These are some of the things the children did at the farm: they cut the lawn planted melons and squash set out 1300 tomato plants planted popcorn pulled weeds in strawberry beds planted flowers raked the

parking lot, trimmed grass around apple trees, and cultivated the entire garden

Several school districts on Long Island, New York, have recently taken over an 80 acre tract of land about 50 miles from the schools on which a work-play camp has been set up as one phase of a year-round school program. The camp is being prepared by the older high school students under the supervision of school staff members. Children taking part in the camp project are transported to the camp site in school busses. Each group remains at the camp for a week. All expense, except food, is borne by the school. When completed, the camp will have a bunkhouse, a playhouse for movies and amateur theatricals, an arts and crafts shop, council rings in the woods, outdoor showers, and other appurtenances of a modern camp in which a wide range of activities can be carried on by school children of all ages. This camp project is linked with the guidance and health services in the school districts which the camp serves. When completed, camping will become a part of the curriculum for all older boys and girls.

Helen Mackintosh (29) has published a bulletin on camping and outdoor experiences as part of the school program which contains illustrations and a bibliography.

The traditional school day offers too limited and brief a program for many children whose backgrounds have little to contribute to enriching their lives. When this is the case, the educational authorities, in conjunction with social agencies, should sponsor schools that are more like good homes in program and equipment, with the children under their supervision day and night. Boarding homes, farm schools, and camps may in time become part of the universal educational system, at least for those children from homes where they would not receive the supervision they need in leisure hours.

The School as a Social Center for the Community

More adults are now going to school, not only the backward and illiterate who want to learn the three R's, but also those who seek information or recreation. The community centered school throws open its doors to all citizens to provide a center for community meetings, to encourage the development of arts and crafts, to sponsor sports and recreation for leisure hours, and to offer cultural education. In the community centered school the parents are as much at home as the children. The school is open at night and on Sundays for adult activities.

This is not strictly a new trend in American education for in frontier days the school was often the only respectable weekday meeting place for adults in the community. Night school classes are no new thing. The chief advancement is in the more effective utilization of the school's resources for adult education, and in the greater leadership exercised by the school in this contemporary movement.

The community centered school established in a rural area serves as the cultural center for the region. The community schools in Kentucky and West Virginia described by Elsie Clapp (7) demonstrate how effectively the school has served as a social center in communities where there are few cultural opportunities for adults.

QUESTIONS AND TOPICS FOR STUDY

- 1 Outline plans for coordinating the work of the school and welfare agencies in your community.
- 2 To what extent might school children participate in a survey of the community as a basis for educational and civic improvements?
- 3 What should pupils know about their community's civic affairs? Local government and finances? Health and sanitary conditions? Housing? Poverty? Crime and delinquency? How should this information be acquired?
- 4 Consider some child you know well and attempt to estimate the relative parts that his home life, school experiences, and community influences play in shaping his behavior.
- 5 List the ways in which your school could more effectively utilize the educative resources of your community.
- 6 How can the library resources of your community be made to contribute more to the education of children and youth? The museums? Historical exhibits? The landmarks?
- 7 Describe several work projects through which children in your community might contribute to civic improvement or conservation.
- 8 Describe a social studies or civics project which would make large demands on community resources. A science project. A health or economics unit. An arithmetic project. An art project. Indicate the instructional resources to be utilized in each case.
- 9 Describe the kinds of regional materials that are needed to increase the school child's understanding of the locality in which he lives.
- 10 List several school projects for the upper elementary or junior high school grades that would help a child understand his community better.
- 11 Describe the local industries and business enterprises in your community and show how they could contribute to the education of children and youth.

- 12 What steps can be taken by the school so that children can learn more about their future civic responsibilities in the community?
- 13 In what ways can leading citizens in the community who represent various professions and avocations promote the more realistic education of boys and girls?
- 14 To what extent is it desirable for boys and girls to obtain actual work experiences in the community while still in school? What provisions for this experience can be made in your community?
- 15 Write five additional questions and topics for further discussion based on the chapter

REFERENCES

- 1 Barnes E. A and Young B. *Children and Architecture* New York Bureau of Publications Teachers College Columbia University 1932
- 2 Blackwell Gordon W. *Toward Community Understanding* Washington American Council in Public Affairs 1943
- 3 Bowen Genevieve. *Living and Learning in a Rural School* New York The Macmillan Co 1944
- 4 Brown Inga E. The Use of Community Resources in Rural Schools' *Social Education* 1941 5 520
- 5 Burton William H. *The Guidance of Learning Activities* New York D Appleton Century Co Inc 1944 Chapter 21 "The Community as a Source of Learning Experiences and Materials"
- 6 Carney Mabel. You'll Want to Read Homemade School Books' *Progressive Education* 1943 20 393 394
- 7 Clapp Fls e R. *Community Schools in Action* New York The Viking Press, Inc 1939
- 8 Clark Harold F. Schools Can Change a Community" *Teachers College Record* 1943 44 408-416
- 9 Clark Harold F and Seay Maurice F. *The School Curriculum and Economic Improvement* Lexington Ky University of Kentucky 1940
- 10 Colcord, Joanna C. *Your Community* New York Russell Sage Foundation 1939
- 11 Cook Lloyd A. *Community Action and the School* Columbus Ohio University Press Ohio State University 1941
- 12 De Lima Agnes. *The Little Red Schoolhouse* New York The Macmillan Co 1942
- 13 Dewey John. *School and Society* Chicago University of Chicago Press, New York McClure Phillips and Co 1900
- 14 Epler Stephen. *The Teacher the School and the Community an Annotated Directory and Bibliography* Washington American Council on Education 1941
- 15 Everett Samuel ed. *The Community School* New York D Appleton Century Co Inc. 1938 Prepared by the Committee on the Community School of the Society for Curriculum Study (Contains an extensive annotated bibliography)
- 16 Franklin Adele and Benedict Agnes. *Play Centers for School Children* New York William Morrow & Co Inc. 1943
- 17 Goodykoontz Bess. Leadership in the Coordination of Social Agencies" *Curriculum Journal* 1942 13 257 260
- 18 Harvey C. C. How a High School Used Its Community as a Laboratory for Social Education." *Social Education* 1943 7, 71 73

- 19 Hanna Paul *The Role of Education in Utilizing Regional Resources* A Preliminary Report New York Progressive Education Association, 1939 (Mimeographed)
- 20 Hanna Paul *Youth Serves the Community* A publication of the Progressive Education Association New York D Appleton Century Co Inc 1936
- 21 Hughes Avah. *The Seven's Discover How the City Gets Bread.* *Progressive Education* 1928 5 229 233
- 22 Hunkins Ralph V. *The Need for Regional Instructional Materials* *Elementary School Journal* 1943 43 398-403
- 23 Kendall Glenn. *Experiences in Developing a Community Program in Education* *Social Forces* 1940 19 48 51
- 24 Kendall Glenn *A Proposed Plan for the Future Operation of the Norris Tennessee Educational Program* Typed Report Teachers College Columbia University Library
- 25 Kyte George C. *The Reorganization and Administration of an Elementary School to Meet the Needs of a Community* Berkeley Cal University of California Press 1925
- 26 Lambert Clara and others. *Schools Out—Child Care Through Play Schools* New York Harper & Bros 1944
- 27 Lynd Robert and Lynd Helen M. *Middletown* New York Harcourt Brace & Co Inc 1929
- 28 McClosky Gordon E. *The Use of Community Resources (adapted) Instruction in the Social Studies to Individual Differences* *Fifteenth Yearbook of the National Council for the Social Studies* Washington the Council 1944 pp 112 130
- 29 Mackintosh Helen K. *Camping and Outdoor Experiences in the School Program* Washington U S Office of Education Federal Security Agency Bulletin No 4 1947
- 30 Mursell James L. "A Focus for Our Schools" *Harper's Magazine*, 1942 No 1103 527 532
- 31 Olson Clara M. *The McIntosh Elementary School as a Community Center Community Living and the Elementary Schools* *Twenty fourth Yearbook of the Department of Elementary School Principals* Washington National Education Association 1945
- 32 Olsen Edward G and others. "Ten Bridges Between School and Community" *School and Community* Part III New York Prentice Hall Inc. 1945
- 33 Olsen Edward G. *The Community and the School* Chapter VI *Review of Educational Research* 1946 16 56-70 Contains a bibliography of 119 titles.
- 34 Potter Gladys L. (compiler) *Exploring Your Community* Washington Association for Childhood Education, 1940
- 35 Reavis William C. ed. *The School and the Urban Community* *Proceedings of the Eleventh Annual Conference of Administrative Officers of Public and Private Schools* Vol. 5 Chicago University of Chicago Press 1942, Part II 80-87
- 36 Renwick Albert R. "Extending the School as a Community Center" *Education* 1944 65 113 123
- 37 Tyler Ralph W. "Responsibility of the School for the Improvement of American Life" *School Review*, 1944 52 400-405.
- 38 Seay Maurice C and McGlothlin, William J. *Elementary Education in Two Communities of the Tennessee Valley* Kentucky University College of Education Bureau of School Service Bulletin. Vol. 14 No. 3 1942.
- 39 Snedaker Mabel "Using Community Resources in the Primary Grades." *Social Education* 1940 4 188.
- 40 Studer Norman. "Study of a Puerto Rican Community" *The American Teacher* May 1937

- 41 Tidwell, Robert E. *Planning Improvement in Rural Living Through the Schools* Bulletin of the College of Education, University of Alabama, 1943
- 42 Tippet, James and others *Schools for a Growing Democracy* Boston, Ginn & Co, 1936
- 43 Weber, Julia. *My Country School Diary: An Adventure in Creative Teaching* New York Harper & Bros, 1946
- 44 Wright, Lulu *A First Grade at Work* New York: Bureau of Publications, Teachers College, Columbia University, 1932
- 45 *Community Resources in Rural Schools* Department of Rural Education, National Education Association, Washington: the Association, 1939
- 46 *Course of Study for Virginia Elementary Schools, Grades I-VII* Richmond. State Department of Public Instruction, 1943
- 47 *Expanding Education to Meet the Needs of Rural Community Life in Virginia* Richmond Virginia State Board of Education, Bulletin No 5, 22, 1940
- 48 Georgia State Department of Education *The Community as a Source of Materials of Instruction* Atlanta the Department, 1938
- 49 *Living and Learning in the Elementary Grades* An Intimate Study of the P. K. Yonge Laboratory School, Gainesville, Fla. University of Florida, 1943 (By the P. K. Yonge School staff) Ch 12, "Utilizing Community Resources"
- 50 *Community Resources in Rural Schools, 1939 Yearbook, Department of Rural Education*, National Education Association Washington the Department 1939
- 51 *How to Know and How to Use Your Community, Yearbook of the Department of Elementary School Principals* National Education Association, Washington the Association, 1941-1942
- 52 *Community Living and the Elementary School, Twenty-fourth Yearbook of the Department of Elementary School Principals* Washington National Education Association, 1945
- 53 New York State Education Department, Division of Elementary Education *The Development of School and Community Relationships Through an Activity Program* Circular No 6 Albany the Department, 1934
- 55 *Science Instruction and America's Problems, Proceedings of the Department of Elementary School Principals* Washington National Education Association, 1932
- 55 *Science Instruction and America's Problems, Proceedings of the Department of Science Instruction* Washington National Education Association, 1940
- 56 "Teacher and Community" *Educational Method*, March 1939, 18 Entire issue
- 57 "The TVA Program—The Regional Approach to General Welfare" *Journal of Educational Sociology*, Nov, 1941 15 Entire issue
- 58 U S Office of Education *Know Your Community as a Basis for Understanding the Schools' Problems Know Your School Series*, No 57 Washington Government Printing Office, 1941
- 59 *Utilization of Community Resources in the Social Studies, Ninth Yearbook, National Council for the Social Studies* Ruth West, ed. Cambridge Mass the Council 1938
- 60 *What Education Our Money Buys* Educational Conference Board of New York State Albany the Board, 1943

Chapter 20

GUIDANCE IN PERSONAL DEVELOPMENT

In conventional schools the teachers primary concern has been subject matter. Today teachers are showing more concern for the general welfare and personal development of the individual pupils in their charge.

Contribution of the Unified Program to Guidance in Personal Development

In the educational approach described in these chapters every feature of the daily program and of the life in school is considered in developing child guidance. Growth in personal development is inevitable where children live and work together with the teacher in a satisfying relationship. Improved pupil adjustments are insured by an environment that contributes to well balanced growth. In the unified program the pupils gain satisfaction from their own efforts and develop and use their personal resources in a well rounded program of work and play. Their impulses are directed toward constructive achievement.

In giving children a chance to try out their powers, to make choices and self-discoveries, to express opinions and to assume responsibilities, the unified program instills a sense of worth and well being which is almost impossible to achieve in a repressive school atmosphere.

The unified program offers many opportunities for informal personal contacts between the teacher and individual pupils in a variety of situations which require planning, resourcefulness, initiative, interest, and aptitude on the part of the pupil. The children can gain valuable socializing experiences through the many close personal contacts they have with one another. Teachers may know their pupils intimately, for the class is like a household with everyone a member of the family.

Functions of Guidance in the School

Recently Dr. John Wade, former superintendent of the New York City Schools, outlined the functions of guidance throughout the

school system The following are some of the points he made in his report

Guidance should be *continuous* from kindergarten through the secondary school

The guidance program should enlist the cooperation of the home, the church and any other child serving agencies in the community

It should be concerned with the health, academic, emotional, and social development and with the vocational direction of the children

It should be interested in the prevention of maladjustment as well as its treatment

It should aim to make children increasingly competent in self direction

It should involve coordinated effort of teachers and specialists

Guidance should be *continuous throughout the child's school life*, it should link the various years of school experiences and establish continuity in the records that pass from teacher to teacher As a result each child can become known as an individual through all his years in school

The Teacher, Key Person in Guidance

Successful guidance depends upon the teachers and the intelligent interest they take in their pupils The classroom teachers, because of their close daily contacts with the children, are in the most advantageous position to know pupils intimately and to help them with their problems of adjustment

The teachers' contributions to guidance should include getting acquainted with *each child intimately, observing the children's behavior* at work and at play, alone and with the group, directing children's impulses into constructive channels, supervising recreational activities keeping comprehensive individual records of pupils in terms of growth goals providing experiences through which pupils may contribute to the life of the school, dealing with minor adjustment problems such as that of the child who is too quiet or sensitive and is usually left out of things, and calling to the attention of the administrative head and the parents any problems that lie beyond the teacher's training or authority (3, 6, 9, 10, 19)

The teacher is best qualified to size up the pupils, not only as individuals but as *members of a group* and to record systematically all relevant facts Still another phase of classroom guidance is the more intensive study of children with behavior difficulties Recommendations

tions may have to be made or remedial steps suggested to the school or home for improving the child's adjustments. Conferences may be necessary with parents and welfare workers in the community.

Guidance in the school can never be reduced to a set of rules, formulas, or techniques but must always deal with each child in terms of his unique situation.

In the elementary school educational guidance can be particularly effective for several reasons as is pointed out by Gertrude Driscoll and others (6)

- 1 The most common practice in the elementary school is for the pupils to stay with the same teacher throughout the school day
- 2 Habits are as yet unformed for the children are young impressionable and highly flexible. They can readily make new adjustments and their behavior can easily be modified
- 3 The modern elementary school program in itself makes a direct contribution to child guidance for the emphasis is on wholesome activities, learning through experience and a unified program rather than on departmentalized subject teaching. In such a program child behavior can be observed in all its aspects and behavior can be modified through adjustments in the program
- 4 External achievement standards are minimized, the standards reside more in the child's own developmental goals. The teacher can study the child's behavior and consider how it may be improved or altered
- 5 During the child's early school years the home can be brought into close contact with the school and through the teacher's suggestions home guidance can be improved

Understanding the Individual Pupil.—The first essentials in teaching are determining the pupil's interests and aptitudes and discovering the causes of his problems and difficulties. Rousseau advised teachers: "Begin by making a careful study of your scholars for it was his belief that a teacher could guide children in learning only through knowing each child as a person, not solely as a learner in the narrow sense. Certainly a teacher cannot go far in guidance without knowing each pupil intimately in terms of his school work, his family, his friends and the community about him."

A teacher can learn from observing children how they can best be managed and trained. A competent teacher understands the significance of the child's observed behavior. Observations should be made in such areas of child development as health (including physical needs and growth pattern) and home environment (early experiences par

ent child relationships, and ways in which the child's home is affected by community influences) The teacher should also discover the child's capacity for learning at school, his abilities and aptitudes, his special talents, his limitations, his interests, and his goals

Personal, social, and emotional relationships and adjustments make up still another area in which the alert teacher should continually observe the pupil The teacher should recognize the friendless child, the dreamer, the aggressive individual, the leader, and the helper among the children

A study of the child's recreational life will bring his dominant character traits, his interests, and his physical capacities into bold relief Studying a child in all these areas can give the teacher a well rounded picture of the child's growth

The teacher needs to know what the children were like and what experiences they had before they came to her, how they have met their problems, and what their backgrounds have contributed to their development in a positive or negative direction The following list suggests the variety of purposes served by the teacher's appraisal of individual pupils

Determining aptitudes for school work

Evaluating outcomes of school work

Checking achievement systematically by ratings and other devices

Determining readiness for beginning school work

Identifying the slow learner, the school failure, and the pupil with special disabilities and defects, and planning remedial and corrective work

Discovering special aptitudes and identifying the gifted student and the pupil with special creative abilities

Identifying the problem behavior child, the truant case, and the potentially delinquent individual, and finding explanations for each one's behavior

Classifying each pupil for promotion or transfer

Studying each child's physical condition, discovering any physical defects, and recommending remedial and corrective techniques

Selecting committees and individuals for specialized classroom and school responsibilities

Discovering pupils' social and emotional traits and their social behavior

Counseling pupils regarding selection of courses, selection of high school and college and personal problems

Giving advice and making reports to parents

Making reports of home, community, and neighborhood conditions as they affect the child

Investigating work and study habits recommending more or less homework and making suggestions for extra work or for dropping work

Giving prevocational and vocational guidance determining vocational aptitudes and giving advice concerning work opportunities

To aid the teacher's informal observation the following devices can be used

Scholastic aptitude tests

Standardized achievement tests in skills and content areas for different grade levels

Questionnaires to determine attitudes and personal adjustment

Rating scales for various traits

Inventories of pupil interests and study habits

Check lists of desirable and undesirable habits

Outlines for interviewing

Outlines for intensive study of individual pupils

Narrative records

Supplementary information may be gained through

Observations of pupils in class work and at play

Evaluation of pupils' work such as drawings maps craft work written work diary records letters autobiographies or poems

Committee reports prepared by students

Photographs of pupils engaged in various activities

Written records of children's school experiences during the year

Conferences with persons who know the pupils well

Observing the Child at School.—The day to day relationships between teacher and pupils offer the most fruitful situations for gaining the deeper understanding of child life so essential to good teaching

The alert teacher will discover through informal contacts much about each child's inclinations. Casual encounters can give the teacher new insight into the child's problems worries and aspirations

The more sympathetic the relationship established between teacher and pupils the more likely the teacher is to understand the basic reasons for a child's external behavior. Most children seek and appreciate a confidant with whom they can talk over their difficulties

In the school that operates on a guidance basis teacher and pupils can become well acquainted with one another. The teacher, moving about among the children can learn much about them by encouraging them to converse freely about personal matters. More can be accomplished if the teacher has the same group for a second year, a common practice in some of the better schools

A child's behavior constantly reveals his needs and problems. Observation of children informally active in the workshop, on the playground, in the gymnasium, in the art room, at the sand box, or, in fact, in all their constructive work will reveal characteristic behavior trends.

Clues to behavior may be gained from children's conversation in dramatic play, from the stories they tell and write, from the pictures they draw, from the diaries they keep and from the reports they make to the class.

The child's deep-seated interests, the things that truly reflect his desires and needs, are often discovered in unguarded moments when children are not conscious of having to please the teacher or anyone else. The physical education period is a particularly fortunate time to observe thoroughly natural child behavior.

Children's interests may be disclosed by their conversation, by their choices of games and recitation, by the reading materials they select, by the materials they ask for, and by the activities they choose when choice is permitted.

One advantage of the unified program is that it allows the classroom teacher more time for unhurried observation of children, and a chance to see how children control and direct themselves when undertaking a project.

The teacher's observations should be as objective as possible and directed toward answering such particular questions as

How old is the child chronologically, mentally, and socially?

What are his behavior characteristics at home and at school?

What unusual experiences has he been through?

How has he been treated up to this time?

What is the present condition of his health?

What satisfactory and unsatisfactory habits has he formed?

What is the nature of his home life? Of his family background?

In what ways does his behavior deviate from the normal tendencies for his age?

Are there any perplexities or problems on his mind at present?

What is their nature?

Some of the answers the teacher may discover through classroom observation. Other facts the school administrator and specialists can assemble and place in the teacher's hands.

For studying beginners in the first grade, J. W. Wrightstone and others (25) have directed teachers' observations by posing the following questions:

What is the makeup of the class with respect to mental capacity, language, and social background? Does the group as a whole tend to be above or below average?

Which of the children have had kindergarten training?

Which are repeating the grade or have repeated at some time?

What is the range of chronological age, the distribution of the ages, and the average age of the group?

Which children have physical defects? What is the nature of their defects?

Which children seem to be generally maladjusted?

Which children come from homes where a foreign language is spoken, thus retarding the learning of English?

What are the dominant interests of these children?

What deficiencies are there in the home backgrounds represented?

What are the children's abilities in language, motor skills reading readiness skills, activities in various media, and capacities and achievements in reading and numbers?

What groupings are suggested by the abilities found?

Methods of observing child behavior have been described by Driscoll (7) and Edna Bailey, Anita Laton and Elizabeth Bishop (2)

The time sampling technique (observation of pupils for brief periods at stated intervals with notations of behavior) helps to systematize observations and to make them more reliable

Studying the Child in Relation to His School Group

The teacher should be concerned not only about characteristics and growth tendencies in the individual pupil, but also about the structure of the group, the friendships and antagonisms within it, its general morale, and the range and variability within the group in such factors as age, sex, scholastic aptitudes, achievement, recreational preferences, and dominant interests. The teacher should observe dynamic interactions among the members of the class, sensing what is going on in the group and discovering who the leaders and the followers are.

By studying the group as a whole, the teacher can evaluate each pupil better in relation to the group in such traits as learning aptitude, reading power, physical development, language facility and the like. Group studies will reveal the range and variability of individual differences among the pupils in a class. Without comparable information about the entire group, evaluation of an individual with reference to the group is impossible.

Questions the teacher needs to consider concerning the group as a whole, and each child's relation to the group include

What is the group as a whole like? How well knit or loosely organized is it? Is group morale high or low?

How does the child in question behave within the group? Respond to group suggestions?

Who are the child's preferred associates in the group? Is he antagonistic toward anyone in the group?

Is the child allied with gangs, cliques, or sub groups?

Has the child a secure place in the group? No status in the group?

Does he like or dislike others in the group?

What is going on in the group? What is this particular child's part in this activity?

Who are the leaders? What is the child's relationship to the leaders?

Is the child a deviate from the rest of the group in any sense—mentally, socially, emotionally, or physically?

Teacher Pupil Conferences.—The teacher may wish to confer with a pupil about his health, taking a part time job, difficulties in his home, failure in his social adjustments at school, or other problems. These need not be scheduled conferences, but may be informal interviews held before school in the morning, at lunch time, before undertaking a new piece of work, on trips, or during a chance meeting away from school.

The teacher should share information so obtained with his parents, if their help is needed. Methods of establishing contacts between home and school are described in Chapter 21.

Learning about Children Through Community Contacts.—Much can be learned about school children from persons who meet them in out of school contacts. Scout and club leaders, persons within religious organizations, representatives of welfare agencies and the courts, and the children's friends and associates. Becoming acquainted with the child in this less familiar area—his life out of school—will help the teacher to understand his behavior in terms of his complex environment.

The school should set up a committee to determine what community agencies have data about the children and to enlist their cooperation in making the material available to the school authorities.

Teacher Ratings of Pupil Behavior.—Teachers' observations are better systematized and tend to be more objective when ratings in terms of uniform check lists are made.

Ratings serve two purposes—to add information to the individual pupil's records and to inform his parents of his progress. Rating

schemes and scales are helpful in appraising pupil growth in personal traits and behavior tendencies. The ratings may have one or both of two bases: first, a rating of the child with reference to others who are considered normal or typical of their age for the traits in question, second, a rating of the child with reference to previous studies of the same child for the traits in question. In the first case the teacher asks: Is this child normal, above normal, or below normal for his age? Is he a high or low deviate from the trait in question? In the second: How much gain or change has the child made since previous observations, and what directions has the change in behavior taken?

An illustration of useful rating devices for elementary grades is found in the *Winnetka Scale for Rating School Behavior and Attitudes*, devised by Dorothy Van Alstyne and others. The advantage of this scale is that the child is rated with reference to the situations confronting him and ratings are given numerical scores that make results convenient to summarize and to compare. With the *Winnetka Scale*, pupils are assigned scores of from 1 to 10 in the following divisions:

- 1 When taking turns with apparatus or materials or participating in a group discussion
- 2 When working on a group project
- 3 When faced with a social situation involving sacrifice of the child's interests or needs to those of the group
- 4 When a child has a social task to be completed
- 5 When revealing his emotional tone in school
- 6 When given a chance to go to adults for help or approval
- 7 When faced with failure
- 8 When in an organized group
- 9 When given an opportunity to take responsibility for a group task
- 10 When in a social situation which allows initiative
- 11 When finished studying a subject
- 12 When receiving help from an adult
- 13 When organizing materials for work

The types of behavior that merit the ten levels of rating in each section are briefly described on the card.

A final score can be obtained in five areas: cooperation, social consciousness, emotional adjustment, leadership, and responsibility.

In rating achievement, an analysis of a pupil's progress in a given subject area, such as arithmetic or social studies, proves to be superior to a single over-all rating of "poor" or "excellent." A fivefold

rating scheme—superior, above average, average, below average, and very inferior—may be used in evaluating such traits as:

Competency and efficiency in work:

Planning

Execution

Persistence of effort

Self-responsibility

Standards of workmanship

Ability to obtain and use information

Skills:

Written expression

Oral expression

Reading comprehension

Spelling and punctuation

Use of facts in solving problems

Creative ability:

Contribution to group discussions and activities

General achievement

Ratings as a basis for reports to parents are described in Chapter 21.

Narrative Records

In a remedial reading experiment conducted by the writer, it was found that individual pupil progress could best be evaluated by means of brief daily accounts of children's reactions to the teacher and to reading lessons. Even the best tests were not accurate enough to measure gains shown by many of the children when the first week's and the final week's records were compared. Without assistance, few classroom teachers can keep records as comprehensive as those which were kept during this experiment, but every teacher can make occasional notations of a child's behavior.

The following notations are illustrative of descriptive notes kept by a teacher in another school. The date of each observation is recorded.

"Eugene can swim at least 4-5 lengths in the pool. During the early test several months ago he quit after $\frac{1}{2}$ length" February 4th.

"Alexander saw that everyone was supplied with a test at the beginning of the period, without being requested to do so" October 11th.

"Kenneth played with a rubber binder and disturbed Joe by making believe he was going to shoot a spit ball at him." December 15th.

The teacher should note both favorable and unfavorable behavior traits. These notes can be summarized from time to time so that they

become a biographical record that will give a cumulative picture of the child's development as he progresses through school

If in addition to these notations the teacher keeps some record of guidance techniques and remedial measures that have been used it will be easier to advise parents adequately. Further details of narrative records are given in an account of guidance techniques by Arthur Traxler (22)

Pupil Self Appraisal—There are advantages in having a pupil rate his own growth. When the pupil attempts to rate himself his attention is called to standards of desirable behavior, the comparison or contrast between his former and his present behavior, the extent of growth he has achieved, and the prospect of growth in the future. When the child participates in his own appraisal he is more likely to be concerned about improvement and to cooperate with the teacher's suggestions. Through self-identification of his assets and short comings, a child can often learn to use his abilities more effectively.

For making a self appraisal the pupil may check a list of personal traits, work habits, and school studies, rating himself according to a simple scale such as

I have improved in _____

I need to improve in _____

I have reached a satisfactory standard in _____

Or the pupil may write out a statement at the end of the term summing up his accomplishments according to his own estimate and the estimates of his associates.

These self appraisal records may constitute all or part of the report cards sent home.

All this effort to learn about children may seem to the teacher to be a formidable undertaking. However, pupil appraisal is not something to be done all at once or once and for all. Furthermore, in the larger school systems a teacher usually is not expected to work alone in this area of guidance.

Learning About Pupils Through the School Records.—Well planned, well kept records are the core of any good advisory service. If comprehensive school records are kept, teachers can learn much about a child by exploring these records. Essential information about a child's background, his physical condition, and his school success should be recorded in the school files.

There is a tendency today for the school to pay more attention to the pupil's personal history as recorded in the school files when

decisions are to be made about him or when transition points are reached in his school career

Guidance needs will be best served by collecting pertinent information about pupils, by having a good system for recording and reporting this information, and by using these records properly in advising pupils, their parents, and others who have to make decisions affecting the children's welfare

Pupils' Records—A teacher cannot remember all the significant facts about even one child in his class, and certainly not about an entire group or about several classes. Essential facts, therefore, should not be left to memory or vague impressions. Unrecorded information may be lost when the child is advanced to the next grade, or it may not reach other teachers dealing with the group.

Occasionally teachers fear the possibility of becoming prejudiced by seeing early in the term a child's previous record. The professionally minded teacher takes a different attitude. He is able to suspend judgment on the child, much as a physician does while he studies the records and compares them with his own judgments. He does not look over the data with idle curiosity, but with the sole aim of helping the pupil.

According to Arthur Traxler (22), records are needed of the pupil's family background and school history, his aptitudes, his achievements, his health, his out of school activities, his educational and vocational interests, his personality traits, and, in the case of a high school student, his plans for the future.

Features of Record Keeping.—The following principles reflect newer trends in school record keeping.

- 1 The record keeping system should be consonant with the school's philosophy
- 2 The individual pupil should be the point of departure in record keeping. The chief aim in recording data pertaining to school children should be to contribute to the welfare of the pupils. The essential facts should be collected and recorded in such a way as to indicate each child's characteristic traits and the guidance techniques that are used to improve his adjustments.
- 3 Good records can help to bridge the gap when the child goes from the elementary school to high school or when he reaches any other transition point in his school career as in transferring from one school to another. Records obtained in the elementary school should go along with the pupil into high school.

- 4 The record keeping system should be planned with reference to the child's entire developmental span during his years in school both elementary and secondary
- 5 The data collected should be accessible and readily interpreted
- 6 The records system should cover all important areas of information including personality, behavior tendencies, and social living, and should furnish a well rounded picture of the pupil's development
- 7 The new information each year should be cumulated with that of previous years to show the pupil's continuous growth
- 8 There should be records that show an individual pupil's status in relation to others of his class or group e.g., in physical or mental development. Charts, scattergrams and frequency distributions are recommended for this purpose
- 9 The records of children showing normal development should be as adequate as those of pupils who present problems
- 10 A distinction should be made between temporary and permanent records. Not all information collected about a child need be permanently filed. Anything not essential to the permanent records should be systematically weeded out. Otherwise records may become unnecessarily bulky and difficult to summarize
- 11 There should be close supervision over all use of confidential information
- 12 There should be more complete records for use at induction and transition points such as promotion from junior to senior high schools or admission to a new school, to give the authorities a fuller understanding of each child and to insure smooth articulation between administrative divisions of the school
- 13 The records should indicate not only what has happened to the child in the school but also what contacts outside agencies such as social agencies, courts, religious organizations, and recreation groups may have had with the pupil

These principles of record keeping are considered at greater length in references 22-34-40

Adjustment Problems of School Children

Every teacher is confronted with problems of child behavior which tend to interfere with progress at school. Don is unruly and obstinate. Billy is unresponsive in class. Judith insists on holding the center of the stage and is too aggressive toward other children. Jane is uninterested in her work. A bright child fails to learn to read because of personal difficulties. Some children are always late, others never finish their work. Some play truant. One child makes poor

progress at school because outside interests detract attention from school activities

A child may be unpopular with the other members of the group who tend to pick on him. The case of the friendless child is illustrated by Jerry, a sixth grader whom other children persecuted by writing on the board in large red letters, "Jerry is a dummie."

Children sometimes show anxiety because they anticipate difficulties. Insecurity shows up in "clowning," "acting up," "talking big," "showing off," and other compensatory behavior. Some children do not focus their energies well, so that instead of learning, they waste their effort in emotional outbursts.

Another group of problems clusters around maladjustments resulting from school failure. The fear of failure itself may result in negativism or unstable behavior.

Children may be difficult to manage at school because of poor home training or unfavorable home conditions. One child who seemed restless and unable to concentrate at school was asked to tell the teacher what the difficulty was. She said that her father had gone away to find work, that there was no money to pay the rent, that her baby brother had been taken to the hospital, and that her mother cried a great deal at night because of the family's predicament.

One of the brighter boys in a sixth grade class was observed one morning aimlessly rubbing his head and not paying attention to anything in the classroom. The teacher was perplexed by his attitude until another child told her that his chum in the Scout troop had died and he was trying hard not to cry at school in front of the other children.

Here are more detailed illustrations of typical problems that confront the classroom teacher.

Julia is a ten year old retardee who has been 'left back' two terms. She has a habit of taking everything that she can conceal. For this petty thieving she has been regularly whipped at home and at school but the punishment has not deterred her from stealing. The school program is wholly academic and decidedly 'over her head'. The child comes from a poor house in a mining community where recreational and cultural facilities are meager. She gains little satisfaction from anything either at home or school. Each succeeding teacher inquires in desperation what can I do to help this child?

Billy lives in a good suburban community where in physical appointments at least the schools rate as better than average. He has a twin sister who is somewhat brighter and stronger physically than he. Since the age of three Billy has suffered from a diseased bone condition of the

left arm which has necessitated several operations, forced him to be absent from school for long periods, and prevented him from participating as fully as he would like in sports. He is lefthanded. The efforts of teachers to shift his "handedness" apparently contributed to his tendency to stutter. All these conditions have marked him as different from the children of his age group in the school. From being forced to conform to all the school regulations Billy, now eleven, has become unhappy, uncertain of himself, difficult to manage at home, and resistant to directions at school—a problem case. It is difficult now to correct some of the mistakes that have been made in his training. His outstanding needs are a school program that will make a place for a child with his disabilities without exaggerating his handicaps, firmer home control that will prevent him from receiving too much sympathetic attention, and more activities at home that will give him satisfying outlets and distract his attention from himself. Improving his adjustment is an educational problem which can be solved through the cooperation of his teachers and parents.

The teacher is confronted not only with these adjustment problems of individual pupils, but also with the distinctive problems presented by groups of children in their work and play. These problems may become more insistent as group activities and committee work increasingly supplant isolated study at many points in the daily program.

All these problems offer three challenges to the teacher: first, to understand the nature and causes of the symptoms, second, to prevent them if possible, and, third, to alleviate them through constructive measures.

Deterrants to learning and adjustment most commonly recognized by teachers and experts are summarized as follows in *Helping Teachers Understand Children* (32)

1. Children are often expected or required to learn things inappropriate to their abilities
2. Children are often expected or required to behave in ways inappropriate to their level of development
3. Certain children may be disliked or neglected by the teacher
4. Individual children may remain isolated or neglected
5. Praise and blame, reward and punishment, encouragement and repression are usually meted out according to school policies, the teacher's purposes for the class, or the teacher's personal code. Causal factors in the individual child's behavior may be neglected
6. The behavior of children is often controlled by means that humiliate them before their classmates, demean them in their own eyes, repress curiosity, or induce a sense of being misunderstood or unfairly treated

- 7 Developmental tasks or adjustment problems with which children are struggling may go unrecognized and help that could be given may not be supplied
- 8 The development of necessary skills and factual learning is often made difficult or even prevented by the school's failure to consider the child's physical condition, maturity level, growth rate, and many other factors
- 9 Children with chronic infections or correctable physical handicaps are often not referred to clinics or physicians or, if referred, are not always encouraged to continue treatment. In many cases, children with limited mental ability are not examined or referred to competent workers
- 10 Children who are successful in conforming to demands at school may actually leave school with important undiscovered and undeveloped abilities

Improving Pupil Adjustments—Children's adjustment problems usually arise in the field of behavior and must be dealt with as behavior manifestations. Remedial techniques are both direct and indirect. Indirect methods include reforming the school program to give children more satisfying experiences, securing the cooperation of the home in the school's concern for pupil welfare, guiding parents in dealing with home problems, and cooperating with social agencies in the community.

Mental Hygiene in the Classroom—A child has certain basic needs that must be satisfied if he is to attain wholesome growth. These include his need for affection, for acceptance, and for security, in addition to his right to feel that he has a place in the group and to derive satisfaction from his school experiences. Unless the child can attain these satisfactions in his school relationships, he will be insecure and unhappy, possibly apathetic or resistant. He may become a bully or showoff, or become introspective.

Individual attention should be given to every child's health and hygiene. Although some children can compensate for poor health through extra drive, the normal child must be in the best physical condition to derive the most benefit from his school work. Every child needs ample time every day for rest, relaxation, and exercise. Physical defects should be corrected if possible, and diet and health habits improved in cases of deficiency. They should be taught to care for their bodies and to understand their physical functions.

Children need to establish satisfying relations with teachers and classmates. A child is helped by teachers who show that they have confidence in him and like him. There needs to be an element of the

emotional in teaching to offset preoccupation with academic instruction. A pat on the shoulder, a reassuring word, or a complimentary remark can go far toward banishing shyness or uncertainty. Children respond well to praise; they are humiliated by punishment. The school should create an atmosphere of security, ease, and encouragement.

The school must make it possible for the pupils to obtain the satisfaction that comes from doing things well. Every child merits the teacher's approval if he has made a sincere effort to do his best. Children gain greater security through development of self-dependence than through too much protection.

Children deserve to achieve at school and to know that they are making progress. A program that assures some measure of success for every child encourages wholesome growth. Occasional self-appraisal helps older children to evaluate the progress they are making. Each child needs to have any special capacities he may possess recognized and developed. A child can learn quite early in his contacts with others that no two children are alike in capacities and interests and that each can make an acceptable contribution.

Children need outlets for emotional expression such as are provided by activities in arts and crafts, music, poetry, and dramatics. Creative work, pretending, and imagining are important at all grade levels as avenues of self-expression.

Problems of a minor nature are frequently only symptoms of the child's immaturity. They tend to disappear if the child grows up in a wholesome environment.

Suggestions for improving pupil adjustments include

Conferring with the pupil and encouraging him to talk over his difficulties

Working with the group of which the child is a member

Using work and play materials through which the child can reveal his deep-seated feelings and work out his problems

Changing the environment by removing the child to a different school or home

Guidance work for a young child is ordinarily indirect and involves improving conditions in his environment, providing more appropriate school activities, and conferring with his parents.

A changed viewpoint may be needed on the part of the child's teachers. Instead of reminding children constantly to be good or 'nice,' the teacher should make specific constructive suggestions about behavior. If you move in closer to the group, you can hear

better", or "If we put away our things after working, we can easily find them again."

Older children can be helped by giving them a better understanding of their own problems. Destructive impulses should be redirected so that energy is applied in positive directions: working at real tasks, having creative experiences, or assuming group responsibilities.

With older children a direct attack can be made on personal problems through frank, friendly conferences in which pupils can talk over their difficulties with sympathetic adults and consider new courses of action. Sometimes much can be done through group discussion. Difficulties may be discussed in class, with the teacher guiding the pupils to solutions of their problems. However, there are times when the best results are obtained through individual work.

Courses in human relations can help older students understand themselves better as individuals and as members of a social group.

The teacher's efforts to improve the adjustments of children who are shy or seclusive, aggressive, stubborn and negative, dishonest, impertinent, lazy, or habitually truant are described by Dorothy Bratton (5).

An account of the practical steps taken by one school system to promote meaningful study of the motivation, behavior, and needs of particular children is given by Daniel Prescott and his associates (32). Extensive use was made of narrative records and material written by the children themselves.

Helping Pupils Through the Guidance Conference.—Better help can be given when several persons who understand a pupil's problems pool their information in a conference and consider ways and means of meeting his difficulties. The persons who attend the conference *should be those staff members who are chiefly responsible for the child at school and those who know most about him.*

Whether the parents attend would depend upon the nature of the case and the objectives of the conference. Outsiders such as social workers or nurses who have worked with the child and his family should be invited.

A REPORT OF A GUIDANCE CONFERENCE

Douglas, nine years old and in the fourth grade, had caused his teachers considerable concern since his admission to elementary school. Occasional conferences have been held in an attempt to gain a better understanding of his problems and to consider corrective steps that might be taken. Attending this most recent conference were Douglas' teacher, the school principal, the school nurse, and the school psychologist.

The boy's early history and development were first reviewed and then his problems—as seen by parents, teachers, and specialists—were considered. The essential facts follow.

Douglas was an only child from a comfortable home, the son of well educated parents. Physically, he was reported to be a healthy child although he had had a succession of children's diseases and during the year preceding the conference his tonsils had been removed. He seemed to have good nutrition and good posture. Height and weight were above average. Altogether, he had missed about a month of school during the year.

Douglas was a bright boy with better than average linguistic abilities. He had a surprising degree of fluency in oral expression and a remarkable memory for what he had seen and heard. His interests were broad and varied.

Douglas showed his superior intelligence and linguistic skill one day when he explained to the class how electric trains were operated after another child had failed in the attempt. Many other illustrations could have been given.

He was an imaginative child, advanced beyond his years and ahead of the other children in literary interests. He showed normal interests for a boy of his age. He was able to read well and seemed genuinely interested in class work.

ADJUSTMENT PROBLEMS In spite of all these assets Douglas presented many problems for the teacher. He was extremely careless in his work, indulged in "show off" behavior, was aggressive with other children, and lacked self control. He disliked routine tasks in the classroom, usually forgetting to do his share. He sought attention by acting silly or giggling in a loud voice over nothing at all. The boy tended to be over active, often running about the room or shifting from one activity to another. He wasted his time by hiding pencils, etc., when he could have been accomplishing something. He was easily led into mischief. He demanded to be first in everything, would fight anyone who passed in front of him, and showed inability to keep his hands off other children when passing through the halls.

The boy's chief faults were his lack of any sense of responsibility and a tendency to argue. He seemed oblivious of the teacher's directions, tended to monopolize class discussion, and needed constant watching to keep him at his work.

He appeared to be indifferent to scolding or loss of privileges as punishment at school. No form of punishment seemed to have any effect. He presented a rather disheveled appearance with socks down, shirt tail out, and hair invariably mussed up, but he seemed quite unconscious of his appearance.

Douglas' work was equally untidy. On one occasion, after handing in a sloppy spelling paper, he made four different attempts before he was

able to hand in a paper that was reasonably neat. He usually left work half done or done in just the way he wanted it with no attempt to meet school standards.

The other members of the class did not trust Douglas. He often collected pencils and erasers that did not belong to him, but there was nothing really intentionally wrong or vicious in his behavior. It merely reflected his generally careless attitude.

He was not popular with the children because in any games requiring self control he was a complete failure. If a boy accidentally touched him in a game, Douglas would stop and fight. He was never elected to positions of responsibility by the other children.

He showed a compliant attitude, usually said "Yes" sweetly and smiled when asked by the teacher to do anything, but rarely suited the action to the word.

The tonsillectomy had kept him out of school in the fall, thus interrupting the good beginning in school that had been made. He was more spoiled than ever when he returned to school after several weeks' absence.

In the gymnasium he found it difficult to stay in line and to wait his turn in leapfrog. He continued being active but without paying attention to the job at hand. When finally his attention was gained and held, he did very well. The recreation leader at school also found that Douglas usually did not follow directions but went on doing just as he pleased. In recreation he seemed nervous, biting his nails if a race was going on instead of yelling or urging his teammates on.

Readjustments had always been difficult in the fall when Douglas returned to school after a summer passed largely with adults.

POOR SCHOOL ACHIEVEMENT His failure to pay attention, to apply himself, to assume responsibility, or to cooperate with the teacher and other pupils had been reflected increasingly in deficiencies in school achievement. Although intelligent his slipshod habits prevented him from acquiring techniques in the skills. Although a spasmodic worker, he sometimes did very effective work.

His spelling was below average. He had listed a favorite book, *Swiss Family Robinson* as "Sisse Flamle robinsin."

Douglas did not apply in his school work the ability that tests proved him to have. In fact, there had been evidence since his first years at school of a steady drop in interest and application.

He showed no chagrin over his poor achievement and took no pride in accomplishment. He was poor in spelling because he would not practice.

HOME SITUATION His mother had often mentioned her problems with Douglas to the principal and had asked help from the school. She had been inclined to count on the school to solve her problems for her.

The teacher had had several conversations with the child's mother who reported that she had great difficulty handling Douglas at home. The

mother said she had her hands full trying to manage the boy. He usually staged a temper tantrum when she remonstrated with him. He tended to argue with her instead of minding her.

The mother's only technique was to scold him. The boy had built up a sort of psychological deafness against his mother's nagging. Apparently, he had been scolded so much at home that he no longer saw any point in listening.

Douglas disliked doing such routine things as dressing or washing himself. When he was especially fatigued he would argue endlessly over some small point. He was very slow about getting things done for he tended to daydream instead of attending promptly to routine tasks. He was difficult to discipline because he paid no attention to his mother's suggestions, but responded with goodhumored indifference. He was inclined to be overexcitable and was easily overstimulated in a group. He tended to be cocksure of his own opinions and tried to force them on others.

The mother apparently was inconsistent in her management of the boy at home where there appeared to be a complete lack of habit training. The mother appeared to derive considerable emotional satisfaction from keeping the boy immature and even from having a 'problem child'. The father thought that the boy should be left entirely alone to work things out for himself and was disinclined to take any hand in the training. The mother expressed her willingness to cooperate with the school in the handling of Douglas but seemed at a loss to know how to begin.

These were the facts presented to the conference.

RECOMMENDATIONS The conference group agreed that Douglas was by no means a hopeless case, he was an intelligent boy who could develop greater insight as he matured. The teacher reported some evidences of progress during the year in spite of the generally unfavorable picture. The boy had fine possibilities for growth once he had gained some skill and had begun to control himself. During the last part of the school term he had improved noticeably over the year before especially in his ability to settle down to study.

The recommendation was made that because he was hyperactive and needed to relax more during the school day he be sent to the health office for rest when he became difficult to manage.

Other recommendations for improving Douglas' adjustment were chiefly concerned with the parent-child relationships. It was recommended that the principal and classroom teacher confer with the parents concerning ways of training the child in routine habits helping him to develop better cooperation with others and assisting him to achieve some measure of self-discipline. As the result of recommendations made at the meeting the mother was urged to help the boy 'grow up' and she was advised to stop nagging him to make simple requests and to see that these requests were carried out. The father was urged to try to see his responsibility in the matter and to give the boy more attention and more

direction. The recommendation was made that Douglas have more wholesome companionship with children his age out of school. It was agreed that he should be rewarded for any improvement in behavior, written work, or techniques in the other skills. Summer camp was recommended. The teacher agreed to arrange for some remedial work to bring the boy up to grade in the skills of spelling and arithmetic. Ignoring his bids for attention was agreed upon as the best form of punishment.

The father was advised to take more of a hand in Douglas' training because he needed masculine firmness such as his training up to this point had lacked.

The final recommendation was that the school situation be used to the fullest extent in helping Douglas mature, since there was not much likelihood of immediate improvement in the parents' techniques for handling the boy.

QUESTIONS AND TOPICS FOR STUDY

- 1 What are the classroom teacher's responsibilities for child guidance?
- 2 In what ways does the unified program contribute to the wholesome adjustment of all pupils?
- 3 To what extent can the school deal with behavior problems that originate in family relationships? Why is it important for teachers to consider these problems?
- 4 What can be done for the nonsocial child? The noncooperative child? The emotionally disturbed child? The oversensitive child? The unruly child?
- 5 Consider the case of some problem child, describe his difficulties, suggest his needs, and outline some ways in which the school can meet them.
- 6 What contribution can group guidance make to improve the behavior and adjustments of individual children?
- 7 What can be done to help a child entering school in the middle of the year make successful adjustments?
- 8 How can the school's guidance services help the child from a foreign home?
- 9 Write a report of a conference with parents relating to a child's behavior problem. A school staff conference.
- 10 What facts should be considered in making a guidance survey of the fourth grade? The seventh? The twelfth?
- 11 Indicate some of the newer trends in pupil appraisal in the modern school.
- 12 Describe the types of records that are needed in the modern school.
- 13 Make an outline of a bulletin on child guidance for teachers. For parents.
- 14 Write five additional questions or exercises suggested by the chapter.

REFERENCES

- 1 Adams Fay *Educating America's Children* New York The Ronald Press Co 1946
- 2 Bailey Edna W Laton Anita D and Bishop Elizabeth L *Staying Children in School* 2d ed. New York McGraw Hill Book Co., Inc 1939
- 3 Bowen Genevieve *Living and Learning in a Rural School* New York The Macmillan Co 1944
- 4 Bowley, Agatha. *Guiding the Normal Child* New York Philosophical Library, Inc 1943
- 5 Bratton Dorothy Classroom Guidance of Pupils Exhibiting Behavior Problems *Elementary School Journal* 1945 45 286-293
- 6 Driscoll Gertrude. Guidance at the Elementary Level. *Teachers College Record* 1938 40 25-33
- 7 Driscoll, Gertrude. *How to Study the Behavior of Children* New York Bureau of Publications Teachers College Columbia University 1941
- 8 Fedder Ruth Counseling Trends in Elementary and Secondary Schools " *Teachers College Record* 1944 46 17 24
- 9 Flemming C. W Cooperative Effort for Guidance in the Horace Mann School *Teachers College Record* 1943 44 1 11
- 10 Hildreth Gertrude H Guidance in the Lincoln School. *Teachers College Record* 1936 37 437-440
- 11 Hildreth Gertrude H *Psychological Service for School Problems* Yonkers N Y World Book Co 1930
- 12 Johnson William H "Adjustment Teacher Services in the Chicago Elementary Schools" *Elementary School Journal* 1937 37, 264 271
- 13 Leonard Edith M Miles Lillian E. and Van der Kar Catherine S *The Child at Home and School* New York American Book Co 1943
- 14 Macomber, Freeman C. *Guiding Child Development in the Elementary School* New York American Book Co. 1941
- 15 Meiss Margaret L. *A Program of Psychological Counseling in the Elementary School* New York Bureau of Publications Teachers College Columbia University 1941
- 16 Plant James *Personality and the Culture Pattern* New York The Commonwealth Fund 1937
- 17 Prescott Daniel A *Education and the Educative Process* Washington American Council on Education, 1938.
- 18 Rivlin Harry N *Educating for Adjustment The Classroom Applications of Mental Hygiene* New York D Appleton Century Co Inc 1936.
- 19 Strang Ruth. *Role of the Teacher in Personnel Work* New York Bureau of Publications Teachers College, Columbia University 1932
- 20 Strang Ruth and Hatcher L *Child Development and Guidance in Rural Schools* New York Harper & Bros., 1943.
- 21 Tiegs Ernest W and Katz Barney *Mental Hygiene in Education* New York The Ronald Press Co 1941
- 22 Traxler Arthur L *Techniques of Guidance* New York Harper & Bros., 1945
- 23 Washburne Carlton *Adjusting the School to the Child* Yonkers N Y World Book Co., 1932.
- 24 Weber Julia *My Country School Diary An Adventure in Creative Teaching* New York Harper & Bros., 1946
- 25 Wrightstone, J Wayne Parke Margaret, and Bressler, Mary "Introduction, Child Study Practices in Selected Schools in New York City" *Journal of Educational Research* 1944 37, 512 520
- 26 Zachry Carolyn. *Personality Adjustments of School Children.* New York Charles Scribner's Sons 1930.

- 27 *Bureau of Child Study and the Chicago Adjustment Plan* Reprinted from the Annual Report of the Superintendent of Schools 1940 1941, Chicago, Ill. Board of Education, 1942
- 28 *Mental Health in the Classroom, Thirteenth Yearbook of the Department of Supervisors and Directors of Instruction* Washington National Education Association 1940
- 29 *Personality Adjustments of the Elementary School Child Fifteenth Yearbook of the Department of Elementary School Principals* Washington National Education Association 1936
- 30 *Bulletins of the Division on Child Development and Teacher Personnel Commission on Teacher Education* American Council on Education Washington
- 31 *Committee of the American Association of Teachers Colleges Child Growth and Development Emphases in Teacher Education* Oneonta, N Y The Association 1944
- 32 *Staff of the Division on Child Development and Teacher Personnel Helping Teachers Understand Children* Washington D C. American Council on Education, 1945
- 33 *Teachers! Are These Your Children?* New York City Board of Education 1946

REFERENCES ON RECORD KEEPING

- 34 Allen Wendell *Cumulative Pupil Records* New York Bureau of Publications Teachers College Columbia University, 1943 Chapter 4
- 35 Association for Childhood Education. *Records and Reports* Washington the Association 1942.
- 36 Gordon Hans C. 'Conditions That Make Effective Guidance Possible Pupil Personnel Records and Reports' *Review of Educational Research*, 1942, 12, 31 33
- 37 Smith Eugene R., Tyler, Ralph W., and others *Appraising and Recording Student Progress* New York Harper & Bros., 1942
- 38 Strang Ruth. *Every Teacher's Records* New York Bureau of Publications, Teachers College Columbia University, 1936
- 39 Traxler, Arthur E. 'A Cumulative Record Form for the Elementary School' *Elementary School Journal* 1939, 40 45 54
- 40 Traxler, Arthur E. *How to Use Cumulative Records* Chicago Science Research Associates 1947

Chapter 21

PARENT-SCHOOL RELATIONSHIPS

To insure the best and most complete education for children there must be mutual cooperation between home and school. Traditionally, school and home have tended to remain apart from each other, but today the better schools are seeking to establish close rapport with every home represented. Teachers have discovered that they can accomplish more with children when they have the parents' cooperation.

Authorities in these schools recognize the powerful educational influences that reside in a child's home and neighborhood and realize what a small part of a child's life the school touches. Consequently, there is a strong effort to round out its program by establishing a close relationship between school and home experiences.

Several methods are available to the school staff in establishing this closer relationship. One would be to enlist parent support for the school's work through acquainting parents with the school's services to all the children of the community. Enlightened parents are more cooperative in campaigning for school improvement. Another method would be to interest parents in the work of the particular school where their children are enrolled so that the parents can lend a hand to the teachers and administrative staff. Still another would be to help a parent understand his own child better so that the training given by home and school can be coordinated. Without the parent's support the teacher is handicapped in trying to reach the child at school or to make recommendations for home training. By cooperating when their assistance is requested, parents assist the school in realizing these objectives.

The school staff takes the lead in enlisting parent support. The all-over planning for parent-school cooperation should be done by the school staff as a whole. The more intimate relations between the classroom teachers and the parents represented in their respective groups are promoted through the close contacts teachers establish with every parent.

Teacher's Role Important

The classroom teacher's interest in working closely with parents and in enlisting their aid proves to be essential in bringing school and home more closely together. When parents lack interest, are new to the school, or are uncertain of their role because they hesitate to 'interfere' in school matters the teacher can win their support through his own cooperative attitude and by giving definite suggestions.

There is no set of rules that can be followed to attain these ends. Considerable ingenuity will be needed by the staff in arousing and holding the interest of the parents. Some of the successful methods schools have tried include the following:

- The organization of an official Parent Teacher body enrolling all parents and teachers
- Orientation of new parents through neighborhood surveys conducted by competent parents under the school's direction
- Provision for parent teacher meetings on a classroom basis so that the parents of children in a particular group can become better acquainted with each other and gain more intimate knowledge of the year's work through the teacher
- Encouragement of school visiting by patrons, and arrangement for school programs on specified visiting days
- Requirement of home visiting by teachers
- Invitations to parents to participate in carrying on projects in the school
- Establishment of library services for parents
- Improvement of reports to parents about children's progress so that these reports can become a more effective means of enlisting parent cooperation

All of these techniques will be considered at greater length in the sections that follow.

What the Parent-Teacher Organization Can Do

In most schools the parent teacher organization is set up as an active body to which all the teachers and parents belong. This official organization is the medium through which parents can work closely as a group with the school staff on all matters affecting public school education. The official parent teacher group should concern itself primarily with matters of school policy and community life as it affects child welfare. Through this organization the school ad

ministrators invite the parents to voice their requests for improved services

The most successful organizations are those that have planned programs and work toward definite goals. Committees of parents and teachers should be organized and charged with responsibility for specific services.

Parents should be helped to familiarize themselves with trends in public education through forums conducted for the discussion of live issues.

The Parent Teacher Association works with the local board of education in building wider understanding of school matters on the part of the public and encourages lay participation in determining educational policies of the schools in the community. Through the P-T-A parents support local and statewide educational legislation.

In one community parents raised money for supplementary school facilities and equipment through a clothing and toy exchange operated through the P-T-A. In another, parents joined with the city library in obtaining more good books for the school. Other official parent groups have helped plan the school calendar or have provided additional aid for handicapped children.

Speakers can be invited to address the parents on timely subjects. These speakers should be persons who can deal with realities and address the parents in their own language. One successful meeting was addressed by the local 'traffic cop' who spoke in very plain language on the parents' responsibility for children's safety.

A headquarters should be set up in the school for the parents' exclusive use. Here parents can meet informally when they come to school, their programmed meetings can be held, and a library of professional books for parents may be maintained.

At Public School 95, The Bronx, New York, there is a cooperation committee of the Parents' Association consisting of three parents and three teachers who meet once a month to consider methods of improving relationships between the school and the homes. Through the efforts of the Parents' Association of this school the community has obtained a public library, traffic lights, one-way streets, an afternoon play center, and other improvements that contribute to the welfare of the children of the neighborhood.

Since most parents can recall only their own childhood school experiences, the school authorities should educate parents to understand the broader objectives and the newer practices of modern education. The foundation for this understanding can be laid even before a patron's child enters school.

Orientation of New Parents Through Neighborhood Surveys

Parent leaders can survey the entire school district, making a chart to show where every family with children in school resides, the number of persons in each home, and other pertinent facts. Then the territory may be subdivided, and parent leaders asked to volunteer to call at each home to acquaint the members of the family with the school, or, if they are new residents in the district, to welcome them into the school family. In some cases these leaders may actually use a planned interview or questionnaire to obtain the desired information and to make a record for the school files. Such a survey will call attention to parents who should be invited to participate in school affairs.

Grade Meetings

Closer contacts can be established with a greater number of parents if monthly meetings on a room basis are held at the school. The time should be selected by parents and a committee of the classroom teachers. A convenient arrangement is to hold these meetings before or after an evening assembly of all parents at the school.

At these meetings the teacher can exhibit the pupils' work, indicate the program being followed, show the textbooks in use, and answer questions. The parents also should be invited to visit the class during the regular school day.

Following room meetings, parents may frequently request appointments for individual conferences with the teacher to discuss their children's problems at greater length.

Certain parents should assume leadership for the year's activities in each class group. These leaders may be elected by the parents of each group at the first meeting in the fall, or they may be appointed by the school authorities.

In the Horace Mann Lincoln School, New York, a parent representative is elected by each grade group or section, and is responsible for arranging grade meetings of parents and teachers, for fostering social activities among the parents of a grade or group, and for considering questions about the school program and other matters affecting the children.

Parents' Questions

Parents frequently raise questions with teachers and parent consultants about many topics, including the educational program, new

practices in education, child training at home, radio, movies, "comics," habit training, eating problems, character training, children's reading, games, toys, hobbies, helping the handicapped or the gifted child, payment for work, allowances, children's use of money, report cards and marks, and promotion. They ask most frequently for help in problems of discipline, study and work habits, homework, orderliness, imparting sex information, social adjustments and behavior, child development norms and goals, home guidance of young children, problems of the only child, helping children assume responsibility, child jealousy within the family group, the spoiled child, the tired child, and the child with nervous mannerisms. They wish to learn how teachers can manage children without corporal punishment.

Parent-Teacher Study Groups

Working together, the school and home should consider their joint problems in discussion groups. Favored topics for these groups are the new trends in education and classroom procedures, report cards, home and school discipline, health, adolescent adjustment, homework, parent child relationships, the value of after school play groups, summer activities for children, the summer camp, the home's contribution to the child's education, and offsetting the factors that contribute to juvenile delinquency.

Topics for one series of parent study group meetings held during the school year were

- The spiritual life of the child
- Home discipline
- Making and breaking habits
- Truth and falsehood
- The use of money
- Resources of the community for leisure
- Does freedom in our schools insure creative work?
- Nature lore for vacation time

For parents of young children the topics were:

- Health habits
- General problems of behavior
- Emotional development
- Beginnings of primary education in a modern school.

Parents Go to School

School visiting by parents should be encouraged because it is the surest way to interest parents in the school and to gain their support.

It has been found when parents come to the school repeatedly, feel welcome in the school, are familiar with the school program, and share with the teacher in planning some of the children's activities, that the school and home can work together more harmoniously. The better schools encourage parents to visit them at any time to see the work of the regular school day. In addition, parents may be invited to special events such as auditorium programs, sports events, parties and celebrations. A guest book may be kept for parents to sign.

Occasional "Parent Days," with the children planning and furnishing the program, can be held at the school. These occasions can be valuable learning experience for parents, teachers, and children. An "Open School Week" may enable the entire community, as well as the patrons, to become acquainted with the school.

"Father's Night" has become a tradition in communities that recognize the need of reaching both parents. Better still is a "Father's Day," held on a day that would otherwise be a holiday, so that the fathers can observe their children during a school day. A club for "fathers only" may be formed.

One school holds "Parents Go to School" night to acquaint parents with work in a modern school. The parents go through the children's school day program in an evening, working on class projects, holding discussions, enjoying the recreation period, experimenting with arts and crafts, and visiting the school's registered nurse for a "check over." A short assembly period starts the "school day." In this way parents can meet their children's teachers and become acquainted with their children's classrooms.

In one school the evening of an "open house" was the first time many people of the community had been to the school. They were amazed at the children's work. Since then parents' visiting days have been held frequently and are always well attended.

In addition to inviting all parents for special events, the school may occasionally invite small groups of parents so that the school staff may become acquainted with every parent.

Parents should be invited to the school often for informal, confidential talks with teachers and principal. Many teachers feel that a 30-minute talk with a parent can explain much about a pupil and often lead to a changed attitude toward him. Misunderstandings can usually be avoided if time is set aside for parent visits.

In one of the larger school systems, a systematic check is kept of all these visits through a "contact sheet" in the central office. The principal and teachers can tell at a glance which parents have or have not been seen during the term. Mimeographed forms are sent out at

planned intervals indicating that a conference with the parent is desired. Parents usually respond to these requests as a matter of course. Through these intimate conferences parents are advised about their obligations to their children at home and in turn give the school helpful information.

Getting Acquainted with the Home

The teacher may learn much about the child's home through talks with parents, visits to the home, contacts of the school nurse with the home, reports of welfare agencies, and information given by parents through conferences and meetings at the school.

Home Visiting—When parent-school cooperation is fostered, parents not only visit the school more frequently, but they do not consider it an intrusion when a teacher expresses an interest in calling at the home. Parents who are not inclined to visit the school can sometimes be reached through home visits. The school should make a special effort to reach underprivileged homes where children are sometimes neglected.

Without home visiting, teachers may lack vital information about the conditions under which children live. Some school authorities believe the home visitation function so important that such visits are required once during the term, and written reports of the visits must be filed in the school office.

By using tact with both children and parents, teachers can usually gain invitations to the homes. So that these visits do not occupy too much of the teacher's leisure time, they should be arranged in advance for a certain afternoon in the week, with school being dismissed a half hour or an hour earlier for the purpose.

In one school system in which Home Call Week was instituted, teachers were authorized to schedule part of a school day regularly during the last quarter in the term for calling at the children's homes. Later, six quarter days in the fourth and fifth weeks of the school year were utilized for this purpose so that teachers could obtain home background information earlier in the term.

In another city, during an enforced two-week holiday at the beginning of the school year, the teachers visited every home represented in their classes. They found this experience invaluable in getting to know each child's background more intimately. During these visits the teachers established friendly relations with parents which continued throughout the year.

Parents Participate in School Planning

Some may be skeptical of the proposal that parents should take a hand in planning the education of their children and that community leaders who are not educators should participate in such activity. Nevertheless, the experiment has been carried out successfully. When parents and teachers have jointly planned the educational program for the community, such cooperation may have begun with a community survey, a school and community health program, or a conservation project.

By participating in the planning of their children's education, parents come to learn more about it and lose their doubts concerning innovations in school procedures.

A "school improvement" committee, composed of leading parents and interested teachers, may be organized. The purpose of such a committee would be to outline and submit to the school authorities proposals for any needed improvements in the school's organization or program.

One school went about its plans for curriculum and program improvement in the following way (19). Early in the year, parents and teachers met one evening in a panel meeting at which deficiencies in the school's activities were pointed out, proposals for revising the existing program were made, and suggestions for innovations in curriculum, teaching, guidance, and pupil study were given. Joint committees were formed to consider the questions raised at the meeting with a parent and a teacher as co-chairmen of each. There were committees for guidance, health, science, the humanities, the arts, social responsibility, and other phases of school work which were noncurricular in character, such as staff personnel. These committees met frequently during the year. Their work included studying at first hand the existing school program, visiting other progressive schools to see how they handled similar problems, and drawing up reports presented at a final meeting of all the parents and teachers. Some proposals concerned changes to be made at the beginning of the following year, others called for long time planning.

Parents Help in the School

Parents not only should visit the school, but in many instances it is desirable that they participate directly in school activities. Parents may accompany the children on trips and assist the teacher as chaperons. Others can help plan and take part in special events. Some-

times there may be as many parents as teachers giving helpful service in the cafeteria or the kindergarten, doing library cataloging, or performing clerical work.

Capable parents should be invited to participate in the school program, to talk to the children, to display interesting materials, to describe their work in the community, and to contribute in other ways to the work of the school. In one Western town several Indians among the parents added a colorful note to the children's study of American Indians by appearing in their bright regalia.

Here are some of the ways in which parents helped in one elementary school that could not otherwise have had the many services that were thus supplied (4).

They raised money that was needed for new equipment, made donations of equipment, and arranged for interesting speakers to appear on school programs. Their services included working in the library, mounting pictures, cataloging records, caring for bulletin boards, arranging book exhibits, lending their cars for museum trips, and calling for and returning materials borrowed from museums. They conducted assemblies and furnished entertainment for the children. One parent, a theatrical manager, helped an upper grade stage in its play. Mothers conducted sewing, knitting and first aid classes. They served as leaders for Girl and Boy Scouts and Brownies. A parent who was a registered nurse did health inspection work in the school. Others zoned the children for emergency evacuation and acted as escorts in drills. Several parents served as administrative assistants, meeting visitors or new parents and escorting them to the principal's office.

Parent leaders in other schools have explored community resources pertaining to health and welfare, and then informed all the parents about these resources and guided them in their use.

Parents, teachers, and pupils can work together on civic projects of all kinds.

Library Services for Parents

Library services for parents are furnished in the larger cities through cooperation with the public library.

The Denver Parent Teacher Association and the Denver Public Library cooperate in a specialized library service for parents. One of the branch librarians serves as library chairman on the P-T. A board of managers. At the main and branch libraries a separate bookshelf is maintained for parents and suggestions are made for locating related materials in other parts of the library. The chief

subjects included on this special shelf are child care, child psychology, and family relationships. A liaison worker between the library and the P-T A keeps the library informed of current interests in the P-T A and sees that the members of the P-T A are informed of services furnished by the library.

Reporting to Parents

The teacher's reports to parents are recognized as an important aid in establishing satisfactory home and school relations. The parents should be invited to help the school determine what kinds of reports are needed for most effective service to both school and home. Some of the ways in which reporting to parents can help in bridging home and school are described in the following section.

Through the years, the report card, sent home periodically to show the pupil's ratings in studies and deportment, has become a tradition. In pioneer days, the report card seems to have been a sort of certificate, or receipt, the teacher gave the parent in exchange for his fee, it was something tangible to show the value rendered for the pay received. Since the private patron paid the bill, this was a rather logical arrangement.

Under present conditions there is mounting evidence that report cards which contain little more than letter or percentage grades in school achievement and deportment can do more harm than good. Report cards have contributed to truancy, made children unhappy, and produced unwholesome rivalry among children. They have served as a punitive device and as a means of forcing children to perform disliked school tasks. Parents, by punishing children for unsatisfactory reports, have misused the information. The cards have often failed to convey information that would aid the parent in understanding the child's progress and adjustments at school.

A high school girl after finishing her first month's work in a factory was asked how she liked it. Her reply was, "Fine! Lots better than high school! Here at the end of the month you get an envelope with your pay in it. In school at the end of the month your folks get a card saying you aren't any good."

There is no question that report cards can support the school guidance program or defeat it, create pupil problems or help to solve them, depending upon the kind of information sent to the homes and upon the ways in which it is used.

In some schools written reports to the home have been completely abandoned and conferences substituted. In other cases, written re-

ports have been eliminated in the primary grades but retained in the higher grades

Reporting to Parents Modern Version.—Reporting to parents is now recognized as only one phase of a larger obligation that of building closely knit relationships between home and school. How to gain parents' support for the school, how to help parents understand their child in his school relationships, and how to enlist parents' aid for the child at school are more fundamental issues than whether report cards should be used and how often they should be sent. Modernizing the report card should be looked upon as only one feature in improving the school's guidance service.

In any attempt to modernize reports to the home, several questions arise. What functions should reports to parents serve? What information should be given to parents by teachers? In what form should information to parents be conveyed?

Many teachers who are concerned about the development of children deplore the practice of rating pupils in terms of letter symbols or numerical marks, especially since the procedure appears to contribute little to the children's growth.

The following general principles reflect the newer trends in reporting pupil progress to parents (See references 6, 14, 15, 16, 17, 18)

- 1 Pupil reports should be formulated so as to develop cordial relations between school and home
- 2 The reports should indicate pupil growth in the major developmental areas included in the school's objectives
- 3 The reports should be comprehensive and informative, giving a picture of the child's achievement and his contribution to the work of the school, as well as some indication of his personal traits as observed by the teacher. Report cards should point out each pupil's strengths and weaknesses and may indicate ways of helping him improve
- 4 Good reports convey some idea to parents of what is going on in school. They should reflect what is being evaluated in the child's program
- 5 The method of reporting to parents which is adopted by a school should be in harmony with curriculum practices. It is short-sighted to modernize the curriculum and at the same time to continue using an outmoded report card
- 6 The newer type of report card is a guidance device that should reveal the pupil's strengths and weaknesses
- 7 Reports should be of such a nature that the pupils can understand them and if they wish discuss them with the teacher

8. There is a variety of ways in which information about pupils can be conveyed to parents. Written reports are not the only method.
9. There are various forms in which written reports can be prepared. Limiting the report to number or letter grades has little to commend it.
10. Different forms of reporting may be desirable at various grade levels. There need not necessarily be uniformity at all levels in the school.
11. Written report cards are most helpful when they are preceded or followed by teacher parent conferences.
12. Numerical ratings or letter grades have little meaning in a school where teaching centers around unified experiences to which individual pupils contribute in terms of their individual capacities. The new type of report indicates the child's contributions to the life of the school and his growth in developmental traits rather than his relative rank in academic subjects alone.
13. There appears to be less need for formal written report cards in communities where the school population is relatively small, where there is considerable permanence in staff, where most of the families are permanent residents, where intimate friendly contact between teachers and parents has been established, and where frequent parent meetings are held at the school.
14. The modern school does more comprehensive "child accounting" with the result that office and classroom records are more instructive than formerly. It would be impossible to convey to parents the information these guidance records contain in any way except through an individual conference.
15. Any move to discard formal report cards or to revise them is best begun in the grade level where such reports are first used. Parents who have never received reports for their young children can become accustomed to a new type of card more easily than parents who are already accustomed to a certain form.
16. Records for transfer of pupils to other schools are most helpful when they contain a description of each child's behavior and achievement ratings in terms of objective test scores.
17. There should be a guidance followup of reports to parents, relating to the problems that have been revealed and giving suggestions for remedial work where it is indicated.

In some schools, parents are required to call at the school for the report if they wish to receive one. This visit gives the principal or teacher an opportunity to explain the card, to discuss the child's record and to go over other records kept at the school with the parent in person.

It has been customary for a school to issue reports for pupils in all grades at precisely the same time. There is little reason other than custom for this practice. "Staggering" the reports makes it easier for the administrative and guidance staff to confer with parents about the information the reports contain and relieves the clerical staff of some of its burden.

Some of the new trends in reporting to parents noted by Arthur Traxler (16) are

- The tendency to include in reports to the home ratings of items other than subject matter achievement
- The use of descriptive reports rather than quantitative marks alone
- The use of informal notes and letters to parents in place of, or supplementary to, more formal uniform report cards
- The sending of reports at less frequent intervals than formerly, in some cases only when there is special reason for communicating with the home
- The cooperation of parents in formulating the type of report cards and in doing reciprocal reporting to the school
- Self ratings by pupils for reports to the home, and pupil participation in formulating report cards

Techniques for Reporting to Parents.—There are several ways in which information about individual pupils can be conveyed to parents by written statements or ratings by personal interviews and conferences with teachers, and by school programs given by pupils, bulletins distributed by the school describing aspects of school life, and school papers and news sheets. All these techniques may be used simultaneously with better effect than can be achieved by any one method alone.

Features of Report Cards.—Recent innovations in written reports show changes in the amount and in the nature of the information included. Newer cards used in the elementary school contain information in three main categories

- 1 A rating or description of habits, attitudes and personal traits
- 2 A rating of the degree of success in achieving the objectives of the major activities undertaken during the term
- 3 A rating of achievement in basic skills

The forms of ratings most often used are

- 1 Grades or marks in the form of numbers or letters indicating a pupil's comparative rank in the class
- 2 Other sets of symbols indicating ability in proportion to achievement

- 3 Check marks to indicate in a list of traits those in which the pupil has shown good or poor progress
- 4 Comments or descriptive statements that highlight features of the pupil's development and his strong and weak characteristics

Illustrations of Reports

These newer features in pupil reporting are illustrated by the school report used in the upper grades of the elementary division at the Lincoln School, Teachers College, Columbia University

The pupil was marked "yes" or "no," depending on whether or not he had achieved class standard in such skills as reading, arithmetic, spelling, and languages, and whether he had made acceptable contributions to the major unit of work and curriculum projects during the term

In addition to these ratings, the teacher wrote brief descriptive comments about the pupil's emotional adjustments, work habits, social and character traits, and personal habits

This card was sent out twice a year, at the end of each school term

At P K Yonge Elementary School at the University of Florida, pupil reports have the following headings: social adjustment, emotional adjustment, work habits, attitudes, subject matter achievement, and achievement in the unit of work

Several schools use marks such as S—satisfactory, U—unsatisfactory, and I—improving in school subjects and contribution to class projects. "Unsatisfactory" is often qualified by subsymbols such as e—lacks effort, a—has been absent frequently, d—should drop the course, i—work incomplete, etc.

In addition to these ratings in academic achievement, on the report cards of some schools a pupil is given a plus symbol (+) if he is satisfactory or a check (✓) if he needs to improve in behavior traits. In one school the list of traits to be checked is as follows:

Works independently	Plays well with others
Follows directions	Has good health habits
Takes responsibility	Speaks with confidence before the group
Works well with others	Works to overcome weak points
Is courteous	Plans work well
Begins work promptly	Participates in school activities
Uses time and materials well	

Hunter College Elementary School, New York, rates the pupil in the following general traits, each of which is divided on the card into various subdivisions:

Emotional habits	Language arts
Thinking habits	Arithmetic
Work habits	Social studies
Physical aspects	Music
Attendance and punctuality	Art

In some cases instead of checking the pupil as 'satisfactory' or 'unsatisfactory' in a list of traits a fivefold rating scale is used in which a check mark is placed at some point in a horizontal scale for each trait to indicate where the pupil stands. Descriptive words are used to indicate each of the five levels. Traits such as the following are rated in this way:

Ability to accept responsibility	Mental alertness
Cooperation with teachers	Posture
Thrift and care of school property	Accuracy
Ability to plan work	Emotional stability
Ability to carry work to completion	Personal hygiene

This type of rating may be used for office records as well as for reports to parents.

A new type of report card has been used successfully in the Hillsborough County Public School system of Florida. Junior primary pupils (Grades I and II) are rated twice a year in such traits as healthful living, social living, work habits and the arts and more frequently in the skills of reading, language, writing, spelling and number work. Each report gives an indication to the parent of the stage the child has reached in reading ability based on the level of material he is reading when the report is made. Children in Grades III through VI are rated in all the language arts, arithmetic, social studies, science, healthful living, social living, work habits and the arts. Teachers are furnished a "worksheet" to be used in making the ratings and for writing down appropriate statements to describe the child's progress. For example, there are 21 statements under 'Growth in Healthful Living' including such items as 'Seems to tire easily and is often restless', 'Has good posture in sitting and standing', 'Enjoys physical activities' and 'Seldom relaxes during rest period'. Under 'Growth in Social Living' are 69 statements such as 'Works well with the group', 'Needs to be helped to become more dependable', 'Is improving in habits of courtesy', 'Insists on having his own way', and 'Shows ability as a leader'.

Another up-to-date elementary school sends to the parent when a child completes the eighth grade a comprehensive list of statements about him under the following headings:

General physical condition	Results of tests in reading, spelling, and arithmetic
Relations with other children	Special interests or talents
Learning difficulties	Parents' relations with the school
Emotional adjustment	
Results of intelligence tests	

Any other information that would be helpful in placing the child is included at the end of the report. These records are useful in making the transition to high school.

Junior and senior high school reports should differ from elementary school forms because in high school the student has several teachers in major subject areas, all of whom usually make independent ratings.

The newer trend in junior high school (grades seven to nine) is to give a more comprehensive picture of pupil achievement than letter ratings or numerical marks provide. At the Theodore Roosevelt Junior High School, Eugene, Oregon (17), the pupil is rated in the following traits:

- Displays understanding of this subject
- Expresses himself clearly in written form
- Expresses himself clearly in oral form
- Reads widely and with understanding
- Uses basic mathematical skills
- Does clear thinking
- Displays self-reliance
- Makes desirable personal adjustments
- Cooperates with others
- Displays creative ability
- Shows concern for the welfare of the group
- Practices good mental and physical hygiene
- Attends class regularly and arrives promptly

In the high school division of the Horace Mann-Lincoln School, Teachers College, students are rated not only on achievement in subject-matter areas such as English, foreign languages, mathematics, and social studies, but also in such characteristics as seriousness of purpose, responsibility, dependability, competency, initiative, thinking ability, creativeness and imagination, concern for others, and participation in school and class work. From time to time teachers are asked to furnish class advisers with brief written statements summarizing their impressions of a student. These statements are used as the basis of the report sent to the home.

Another type of report lists a pupil's strong and weak points and the areas in which further guidance would be helpful.

A combination of written comments summarizing the teacher's impressions and a brief check list seems more desirable to many teachers than either method alone

Some teachers prefer a more complete report which uses narrative statements, although this process is more time consuming than checking and rating a list of traits. The following is an illustration of this method of reporting

REPORT OF M, A PUPIL IN GRADE III

M is a worthy member of the group. He is bright and cheerful. He has made good adjustments to the group. He is popular with his classmates and enjoys working with them. He has a good background of information and is eager to share his experiences. He is gaining in self confidence.

M has made good progress in the skills. He is capable of doing very well, but tends to finish a job in a hurry rather than to do his best. Arithmetic is easy for him. He enjoys helping the other children. He reads with good comprehension.

Through improvement in manual skills he has become more secure in the group. He uses his knowledge to good advantage in the group.

Music He has gained in self confidence in music class.

Home arts Improvement has been shown in his manual ability and in attentiveness.

Arts He is unusually gifted in painting. He achieves well balanced results.

Recreation He responds well to responsibility. He is capable and enjoys the activities.

Shop work He shows more interest than he did at first. Formerly shop work was a play period for him.

In certain schools where teachers and parents have many informal contacts, teachers prefer to write notes to parents at intervals, mentioning the child's successful achievements and informing the parents of attention the child requires. Recent school activities may be mentioned in these reports.

Descriptions of Class Activities.—Another type of home report that supplements a check list of pupil traits and rating of school achievement is the description of school activities carried on by the class during the term. These reports should be mimeographed so that the parents of each child may receive a copy. At the bottom of the descriptive statement space may be left for rating the individual pupil's contribution to the activities described. The report should be written to interest the parent in the school and to give him a better understanding of the term's work. The description may be accom-

panied by pictures of the class at work. The report may even be developed into a bulletin. Illustrations of these new type report cards will be found in a publication by Gertrude Hildreth and Josephine Wright (8).

Teachers in one junior high school combined a brief description of the major project of the term with an invitation to parents to see the pageant produced as its culmination and for personal conferences. This invitation read as follows:

TO PARENTS OF THE SEVENTH GRADE

In the social studies and English classes during the past few weeks the boys and girls have been working on a pageant as a summary of their study of South America.

May we take this opportunity to invite you to come to see the seventh grade's interpretation of South American history as presented in the auditorium on Thursday, April 3rd at 2:00 o'clock.

If you wish to have at this time any information about your child's progress, we shall be glad to arrange for a conference with you.

Sincerely yours,

Teacher

The suggestion has been made that parents should be required to rate themselves on the response they make to the child's report card whether they show sympathetic understanding, confer with the teacher when difficulties are indicated, and do everything possible to make home conditions satisfactory for the child's growth.

Pupil Self-Ratings.—At marking time the older pupils can make their own reports by going over records they and the teachers have kept of their work and then writing summaries of their learning progress. There should be descriptions of their school accomplishments and of the efforts they have been making to become better citizens. The pupils can assist the teacher in drawing up the list of traits on which they are to be rated; this is one of the ways in which pupils can assume responsibilities that contribute to their growth.

Developing Mutual Understanding Through Parent Conferences

The friendly conference between parent and teacher or principal appears to be the best method so far devised for avoiding misunderstanding and promoting good feeling between home and school. In

some schools these parent conferences are so highly valued that they have replaced written reports altogether. In other schools the conference supplements the written report.

Too frequently the only contact parents have with teachers and administrators occurs when something goes wrong. When conferences are scheduled regularly with all parents the conference period is usually welcomed as a time when parents and school staff members can confer in a friendly way.

The chief values of parent and teacher conferences are

- 1 The parent can be made to feel that he is a participant in the child's school education.
- 2 The parent can be informed in a personal way about the school program.
- 3 The parent can learn directly from the teacher about the child's behavior and his adjustments at school.
- 4 The parent can furnish the school with information about the child's problems as they are viewed at home.
- 5 Teacher and parent can work together toward mutual agreement on the best plan for dealing with the child both at home and at school.

Sometimes a child presents different sides of his personality at home and at school, a situation that can result in misunderstanding between parent and teacher. Such an undesirable development can be alleviated or prevented before it occurs through a parent-teacher conference designed to bring to both a better understanding of the child's whole personality.

The most successful conferences result from careful planning. The teacher or principal should have ready the cumulative folder in which the pupil's personal history and actual examples of his work may be found. Parents should be invited to come prepared to raise any questions they wish. During the conference parents should be encouraged to offer any information pertinent to the child's education and to discuss such matters freely. Together parent and teacher can explore the situation in an attempt to arrive at explanations and to reach solutions. The teacher should avoid making remarks that will imply personal criticism of the parent.

If no more than a half hour is available for the conference, the time may be spent somewhat as follows:

The first five minutes can be used as an introductory period. In the next ten minutes the teacher can describe the child at school and in the remaining fifteen minutes the parent can describe the child at home or raise questions about the pupil's school adjustments with

the teacher answering questions or making suggestions. If more time is needed, arrangements for a future conference should be made. Whenever possible, teachers should summarize interviews with parents in writing, noting information given and recommendations made.

One busy school principal holds as many as four to five hundred of these conferences every year.

The following report describes a conference concerning a child whose mother was having serious difficulty managing him.

REPORT OF A PARENT CONFERENCE

Mrs. J. came in this afternoon at the teacher's request to discuss three problems relating to her son, B. 1 his unkempt appearance, 2 his unfavorable attitudes, 3 his tendency to take things that do not belong to him.

Mrs. J. had just come from a conference with the principal on these problems. She showed a friendly attitude as she looked at the boy's latest report card which indicated satisfactory ratings in skills and considerable improvement in attitude. She herself feels that the boy's behavior has shown a vast improvement over that of a year ago, but she realizes that a great deal remains to be remedied. She feels that the difficulties are fewer and less serious during the summer when he goes to the country or to camp.

Her household arrangements are considerably different from those in previous years. She is now at home more often looking after the children, and her husband, who was frequently in conflict with the boy, is in the army.

The teacher pointed out that the school is anxious for the boy to show more maturity in all aspects of growth—in his grooming, in his respect for property, and in his social mindedness. He has seemed completely self-centered.

Teacher and parent together reviewed the daily program of the boy and his younger brother. Mrs. J. regrets that the boy gets home from school so late that there is little time for him to play out of doors. He has music lessons one afternoon a week and, for a time, had religious instruction one day a week. In his spare time he reads avidly, particularly comics and cowboy stories. He seems to crave adventure and has few satisfying outlets in play after school. On Saturday, however, he is with a play group. The mother feels that he needs Scouting activities to satisfy his craving for adventure. The mother gets him the things he requests, e.g. science materials, but he quickly loses interest. He has received an allowance of 25 cents a week which was recently increased to 35 cents at his request. Most of the money is spent on comics.

After getting this picture, the teacher and mother together began to examine possible techniques to further the boy's maturity. The mother confessed herself at a loss. She feels she has tried everything, and in the

last moment of the conversation confided that she knew she was "entirely too easy to be very helpful." The teacher suggested that much more responsibility should be assumed by the boy in matters of daily grooming, because this is a slow learning process in which there should be no let up. Next she suggested depriving him of some privileges and punishing him reasonably in other ways for his unsatisfactory behavior. She suggested talking over with him in a quiet moment the kind of behavior his mother expected from him. He should be encouraged to share the things that he prizes. It was agreed that nothing would be said immediately about his latest disregard of property rights, but that after a week or so the mother would discuss with him the matter of respecting other people's possessions. Mrs. J. is certain that her disapproval has a deterring effect on the boy and that no doubt this is the severest punishment he can receive. The teacher suggested that he needed more satisfying outlets for his craving for adventure. Teacher and mother both agreed that it was unfortunate that he could not associate more with men whom he could admire and imitate. The mother said that she considers the boy's behavior inborn but the teacher indicated that behavior traits such as B. shows are largely acquired under the stress of many complex circumstances.

At the conclusion of the interview, which lasted nearly an hour, Mrs. J. expressed her earnest desire to carry out the plans that she and the teacher had agreed upon.

Parents Report to the School

Asking parents to report to the school represents another trend in parent and teacher relationships. This request seems only fair as an exchange for the information the school supplies the parent. Even though a few parents may be indifferent or unable to cooperate, most parents will be found willing to give the school information about the child's health history, his home background, the parent's aspirations for the child, the child's relations toward his parents at home, and other pertinent material. Parents can cooperate by furnishing this information to the school in writing through a home information questionnaire. A copy of the form that has been used at the Lincoln School, Teachers College, New York, is obtainable from the College's Bureau of Publications. A shorter form is published in *Helping the Child to Read* by Hildreth and Wright (8). In other cases, information can be given by parents to the school during personal conferences.

QUESTIONS AND TOPICS FOR STUDY

1. What are the advantages of gaining parental cooperation in the work of the school?

- 2 What are some of the practical ways in which the cooperation of the parents can be gained?
- 3 How can the parents' understanding of new trends in education be increased?
- 4 When is home visiting by the teacher helpful or necessary? Should every teacher visit every home represented in the class each term?
- 5 To what extent can parents share in the actual work of the school?
- 6 What can be done about parents who fail to send children to school on time, lack standards of hygiene, or show indifference towards the teacher's efforts?
- 7 How can school records be used to improve parent school relations?
- 8 What kind of report card is most helpful to parents?
- 9 Contrast new and traditional styles in report cards. What are the advantages and limitations of the new cards?
- 10 Draw up an improved report card for a modern elementary school. For a junior or senior high school.
- 11 How can report cards be used to further understanding and cooperation between teachers and parents?
- 12 Is it necessary to use a different kind of report card for unified activity teaching than for traditional subject teachings?
- 13 Indicate the advantages of parent teacher conferences.
- 14 Write up a parent's conference with a teacher or principal concerning some child's school or home problem.
- 15 Write five additional questions or suggested exercises based on the chapter.

REFERENCES

- 1 Baruch Dorothy. *Parents and Children Go to School*. New York: Scott, Foresman & Co., 1939.
- 2 Bowen Genevieve. *Living and Learning in a Rural School*. New York: The Macmillan Co. 1944.
- 3 Brooks Fred E. "Stimulating Parents' Interest in the School." *Elementary School Journal* 1946 46 323 325.
- 4 Brumbaugh Florence. "How One Group of Parents Helped Their School." *Parents' Magazine* August, 1942.
- 5 D Evelyn Katherine D. *Individual Parent Teacher Conferences. A Manual for Teachers of Young Children*. Practical Suggestions for Teaching No. 9. New York: Bureau of Publications Teachers College, Columbia University, 1945.
- 6 Gustin Margaret and Hayes Margaret L. *Activities in the Public School*. Chapel Hill: University of North Carolina Press 1934.
- 7 Hemstead, H. R. "The Interdependence of the Home and the School." *Progressive Education* 1926 3 342 345.
- 8 Hildreth Gertrude H. and Wright, Josephine. *Helping Children to Read*. New York: Bureau of Publications Teachers College, Columbia University, 1940. Appendix.
- 9 Mason, Martha. "Partnership of Parents and Teachers." *Journal of the National Education Association* 1927 16 231 232.

10. Metteer, W M "How California Elementary Schools Report to Parents" *California Journal of Elementary Education* 1942, 10 135 131
11. Patri Angelo *School and Home* New York D Appleton Century Co., Inc., 1925
12. Rossbach Edith. *Parent Teacher Activities at Lincoln School* New York Bureau of Publications Teachers College Columbia University 1938.
13. Sheehy, Emma D Parents the Teacher's Asset. *Teachers College Record* 1945, 46 379 384
14. Simsarian Frances P "Cooperation Between Home and School." *Childhood Education* 1942 19 154 157
15. Strang Ruth. *Reporting to Parents* New York Bureau of Publications Teachers College Columbia University 1947
16. Traxler Arthur E. *Techniques of Guidance* New York Harper & Bros., 1945 Chapter 13 Reports to the Homes
17. Van Loan W L and Williams Mildred "Reporting Pupil Progress to Parents" *Elementary School Journal* 1943 44 215 222
18. Walecka John A Improving Pupil Teacher and Parent Teacher Relationships. *Elementary School Journal* 1942, 42, 23-28.
19. Cooperative Planning *The Link* Publication of the Lincoln School of Teachers College Columbia University, 1942.
20. *Education for Better Parenthood*. Baltimore *Bulletin of Education* 22 No 2 Baltimore Board of Education 1944-1945 Entire number
21. New York Principals Association. *Reporting to Parents* Bulletin No. 6, 1938. Albany N Y State Department of Education.
22. *Handbook for Parents* Richmond Va. State Department of Education.
23. *Parents Questions*. Child Study Association of America. New York Harper & Bros., 1936 Chapter IX
24. *Parents and Teachers a Survey of Organized Cooperation of Home School and Community* National Congress of Parents and Teachers. M S Mason ed Boston Ginn & Co 1928.
25. *The Principal and His Community Eleventh Yearbook of the Department of Elementary School Principals* Washington National Education Association 1932. Chapter 4 Home Contacts Sought by the School pp. 227 264

Chapter 22

MEETING THE NEEDS OF INDIVIDUALS

The program of the modern school is based upon the democratic conception of education which implies respect for individual differences. Every child is considered as a unique person with individual interests and talents to be studied and developed. Teaching is improved when tasks are adapted to the abilities of the pupils, and time is saved when the number of failures is reduced. Instead of forcing pupils to make futile efforts to learn things of little value or interest to them, teachers give them tasks at which they can succeed and in which they are interested.

Individual differences have posed serious problems for teachers ever since the trend toward urban living brought mass education and the graded school into existence. Various measures, some of them quite artificial, have been instituted from time to time to meet the instructional problems that arise in the graded school. Two of the most common of these attempted solutions have been to provide for remedial work and to have the bright pupils tutor the slower children.

Organized research to discover the principles of learning and resulting unified programs of instruction have presented new possibilities for individualizing instruction through diversified assignments for small groups and through individual guidance of learning. In unified teaching, the program is adaptable and many-sided and uniform promotion standards are avoided. The teacher is free to develop an elastic program that provides learning experiences for the children, both as a group and as individuals with marked differences in their backgrounds and capabilities. The dull child is not expected to do the impossible, nor is the gifted child permitted to slide along with mediocre achievement.

Variability Among School Children

The practice of dividing school children into grade levels has been based on the assumption that the children at any level are similar in aptitude and accomplishment and that for all practical purposes they

can be treated alike, can achieve the same standards, and can learn equally well from the same textbooks. Grading elementary school pupils in six or eight levels is an administrative convenience, but such grouping does not insure equality in capacity and achievement among the pupils on each level.

If all the children in a class group were exactly the same age, there would still be a wide range in talents and interests but children in typical school groups usually vary in ages with a difference of a year or more between the oldest and the youngest—a fact that makes the problem even more complex. This means that, in the first grade, for example, the oldest child will be older by twelve months or more than the youngest. At this age level, every month makes a substantial difference in capacity for learning. The usual age range in the upper grades and high school is still greater.

Diverse races make for even greater heterogeneity in the school population. Wide-range achievement test results show that during the middle years, school children in the same grade tend to range a full six years or more in academic achievement and in mental age (6, 40).

Marked differences appear as soon as any attempt is made to teach or train individuals of diverse ability and background. Candidates for the "awkward squad" show up even in the first grade. Every teacher has observed how children tend to "string out" just as soon as learning at school begins. The fewer children there are in the group, the more obvious the tendency and the wider the differences seem. Variability becomes greater as the upper grades are reached (22).

Children within the same age or grade group vary in the way they learn, in the rate at which they learn, in the amount of interest they have in learning, and in their final status when maturity is reached. Variations are found in both mental and physical traits, such as height, weight, motor skills, learning ability, language usage, personality, interests, speed of response, and achievement in various skills. Individual variations in personal traits, basic reaction patterns and emotional responses are even more apparent. Each individual has his own independent drives and pattern of emotional response. Chronological age does not bear perfect relation to developmental status in mental traits, skills, and capacities. A slow-developing thirteen-year-old child may be more like an eight-year-old than a normal thirteen-year-old, and may even prefer the companionship of eight-year-olds. This phenomenon is found at all age levels. A high school senior may have achieved more than a college sophomore, a six-year-old child may have reading competence beyond that of some eight-year-olds.

Cumulative records indicate the tendency of traits to persist in the direction and rate of growth originally shown (19).

The policy of "straight promotion" for the majority of children, which has been widely adopted during the past few years, tends to increase the range of variability in achievement and ability in any class. According to the plan of continuous promotion, children advance a year each year according to their chronological age rather than according to any arbitrary standards of accomplishment. The author has pointed out elsewhere the advantages of "straight promotion," especially for children nearing their teens (17), but the adoption of this policy poses a dilemma for schools in which the traditional achievement standards are adhered to and there is little provision for individualizing instruction or aiding the slow learners.

It seems foolish to advocate "straight promotion" on the one hand, and uniform courses, texts, and fixed standards of achievement on the other. The advocates of straight promotion clearly must also recommend individualizing instruction. If the continuous promotion policy is carried out, children will be together in similar age groups in successive years, but they will need grouping and sub-grouping for many activities, and, in addition, individual help in skills.

Educational Provisions for Individual Differences

The facts about individual differences suggest the futility of setting a single uniform standard of achievement for children of the same age and grade. Better results can be obtained if instead of working for uniformity in achievement, the teacher stimulates each child to achieve his best in terms of his capacities. Furthermore, the facts suggest the advantages of diversified classroom activities that provide opportunities for unique contributions from each child in the group.

Neither curricula nor standards have any validity unless they are based upon the abilities, interests, and requirements of individual children. The school has no right to ask or encourage a child to study a subject or carry on an activity unless he has demonstrated that he has the ability to learn from it and in all probability will succeed if he undertakes it. Only an individual approach will help the child to develop whatever strength he has and to overcome whatever difficulties impede his normal development.

The wise teacher accepts the children as they are and tries to understand each one and to appreciate him for his individual merits. The teacher begins teaching the pupil at the point where he needs help, not where theoretically he ought to be at his age, and helps him grow

in ways appropriate to his abilities. If these precautions are taken no pupil will undertake work in which he must inevitably fail, but every child will progress at his own rate.

If wide variability within class groups is accepted as inevitable, then teachers must have a greater range of materials to work with as well as permission and encouragement to set up variable standards of accomplishment and to reward pupils equally for their varied achievements. All this presupposes, of course, that teachers will be prepared to discover each pupil's particular strengths and weaknesses.

The special needs of the handicapped deserve far more attention than the school usually accords them. Mentally retarded children, dull children, problem children who constitute the largest failure group, and children with special defects including those who are crippled, cardiac cases, the deaf, or the partially blind—all need special attention and help if they are to succeed in school.

Instead of wasting time wondering whether differences among children are permanent, whether they are environmentally conditioned or inborn, teachers must deal with these differences realistically, never giving up the hope that even though the child's actual capacities may not improve, his use of his capacities can be developed to the utmost.

Individualizing instruction does not mean teaching each child individually and apart from every other child in the group, nor does it mean permitting a child to do as he pleases. It does not imply complete lack of uniformity, lack of any common basis of instruction, or lowered standards.

A good illustration of individualized instruction is found in health education. Here each pupil's requirements differ from those of every other child in his class, yet there is a common body of information and set of habits that all should learn. The teacher's task is to see that everyone gains the common understanding in this area, yet at the same time practices the habits and learns the skills he needs most.

In the past, difficulties in providing for individual differences in school instruction have been caused by failure of the staff to recognize individual differences in pupils or to interpret correctly the available data regarding individual differences, by lack of materials to put the differentiated program into effect, by lack of definite knowledge revealing the extent of individual differences in the school, by lack of administrative backing for teachers' experimentation, by lack of public support and parental understanding of the problem and methods for meeting it, or by lack of an adequate record system which would provide the information necessary for an adequate understanding of the pupils' backgrounds and earlier training.

Foundation for Individualized Instruction

Differential education in a rather extreme form was proposed by Plato and described in his classic *Republic*. The concept was reemphasized by Locke in modern times as a fundamental educational principle. Respect for individuality in pupils characterized Pestalozzi's educational philosophy, and this same theme was preached by Herbart.

Since about 1915, practical educators have experimented with methods for individualizing instruction. The trend toward the "lock step" in education that was a natural concomitant of compulsory education in urban centers eventually tended to bring the individual child's problems into sharp focus. Emphasis has gradually shifted from the regimentation of mass education with its inflexible standards, methods and curriculum, to the more democratic methods of teaching with individualized goals, programs and procedures.

The foundation of individualized instruction is the accurate determination of every child's learning potentialities through a skilled professional diagnosis of his talents, capacities, special abilities, and defects. These facts are needed before the first educational decisions concerning the child are made. Adaptation of the school program must begin at the outset of each pupil's school career, and must not be delayed until failure results or it may be too late to restore the child's confidence in himself.

Another problem is to educate parents to understand the deviations in ability and achievement that children show. Some parents wish that their child could resemble others in school attainment and hope that through specific educational effort any deficiencies he reveals can be overcome. Parents tend to offer less objection to special provisions for a child if they can be shown that instruction is individualized for all children, that every child is being helped to make the most of his resources, and that special consideration is given those with handicaps.

Methods of Individualizing Instruction

Instruction can be adjusted to the needs of individuals in a number of ways. Descriptions of various methods will be found in the list of references at the end of this chapter. Individual differences can be provided for through the use of

1. Ability grouping and classification
2. Subgroupings within the class

- 3 Individualized work and assignments in group projects unified courses and curriculum units
- 4 Individual unit assignments for a specified period of a week or a month
- 5 Individualized study materials textbooks workbooks and equipment
- 6 Variations in standards and goals
- 7 Tutors and adjustment teachers for individual and remedial work
- 8 An educational guidance program with adjustment services

The general trend toward the reduction of class size is in itself a distinct aid in individualizing instruction

Grouping and Promotion

Grouping classification and promotion are administrative procedures that vary with the school's policies. Improved classification procedures reduce the need for differentiation within the classroom.

The possibility of grouping pupils according to predicted learning rate when there are enough pupils for more than one class at any grade level is greatest in large population centers where the school population is correspondingly large. Hence this means of providing for individual differences can usually be applied most effectively in schools situated in large cities.

The grouping of children with similar ability in the skill subjects is universally recommended as one method of individualizing instruction.

In modern programs based on ability grouping the pupils do not stay together in a single classroom for six hours a day seeing nothing of the rest of the building and the other classes. Instead grouping is more fluid: smaller groups within the class carry on projects and groups within the class join with groups in other classes for specified work. The whole school assembles for meetings in the auditorium or the upper grades or lower grades may have their own assemblies. There may be many small group meetings attended by selected pupils from several grades and classes. An older group of children may work with a younger group directing their activities in some enterprises. Small groups of slow learners from several classes may work together for a time on reading or arithmetic skills. These groupings are often informal and are not considered permanent. Grade designations in some instances may be given up entirely.

There is general agreement that the mentally retarded can best be taught in classes in which they do not have to compete with younger,

more rapidly learning pupils. Grouping together the upper 5 per cent of pupils according to ability is less often advised.

There is little evidence to support the argument that dull children are mentally stimulated by being kept in classes with brighter children, at least so far as learning skills or acquiring information is concerned. Leaving the dull in undifferentiated classes usually results in failure, discouragement, and unruly behavior. In such classes, they have little opportunity for social participation. Under these circumstances the slower learner seldom makes even the progress commensurate with the rate indicated by his potentialities. In classes with others who learn at about the same rate as himself, he finds school work more enjoyable and makes proportionately greater progress.

Differentiating Instruction Through Unified Teaching

The activity program and unified teaching seem in many respects well adapted to individualized instruction. With school experiences organized around curriculum units, the classroom resembles a drama in which each individual has his unique part to play, each part contributing to the central theme and indispensable to the success of the whole. The unified program, in contrast to the textbook study and recitation technique, is flexible and adaptable. It allows wider scope for both pupil initiative and for responses at various interest and maturity levels within a single group.

Centering learning around curriculum units instead of separate subjects makes a contribution to individualized instruction because the tasks and assignments on which the children work are diversified, each pupil makes a different contribution, and uniform accomplishment standards give way to varied goals set in terms of each child's demonstrated capacities. Yet at the same time, children are cooperating in group enterprises. In unit teaching, laboratory and field activities supplement textbook study and recitation periods. Achievement standards are determined by the individual pupil's responses to his opportunities. Every child is judged on the basis of the contribution he can make to the activities under way. As the discussion in Chapter 6 has shown, less emphasis is placed on lessons set by the teacher to be learned and recited by the pupil, more on the child's discovery of problems appropriate to him and his employment of suitable techniques to solve these problems. The pupils exercise choice in selecting the various problems to be studied, a condition that insures adjustment to individual capacity.

In the unified program each child has definite goals, he knows what those goals are, and he works to attain them, but there are

different goals for different children All are aware of these goals because they are frequently discussed

Subgrouping within the class with each child a member of a committee in charge of some phase of the project is one of the best ways of insuring that pupils work at tasks within their capacities and that each child receives individual help

Groupings within the class can be flexible and should shift from time to time At certain times there will be activities planned and carried on by the entire class at other times by groups within the class and sometimes each child will work alone on a project

Differentiated Unit Assignments

Widespread experimentation has been carried on with individual unit assignment programs and unit contract plans either in connection with the unified program or with traditional subject teaching Various names have been given to these individualized work plans developed in elementary and secondary schools Among them are the so-called problem method the laboratory plan the long unit assignment the contract plan the Winnetka technique the Morrison Plan and the Dalton Plan In these plans a unit assignment is given to the child to complete within a specified period of time perhaps a week or a month (29 31 39)

The chief characteristic and most advantageous feature of these varied plans is the opportunity for the child to work independently at his own rate and on a level adapted to his abilities and interests There is also greater opportunity for the teacher to confer with each child about his learning problems The individual assignments also aid in diagnosing individual learning problems

In both elementary and high schools teachers have differentiated instruction either by making a common assignment allowing different rates of progress on certain topics while requiring all pupils to complete the unit or by differentiating the unit assignment itself making it a maximum minimum assignment The latter type of assignment is arranged so that pupils can make progress at different rates and finish on different levels definite minimum requirements are established for mastery and there are opportunities for pupil and teacher conferences This is virtually a multiple assignment plan but one that is carried on with pupils at different achievement levels within the same class group As many as three levels of achievement may be provided for in each class Pupils may work together paired according to ability

Another method of differentiating instruction is to make special assignments for certain pupils based on the common group objective. Each pupil is completely independent in selecting his material and in organizing his report. More than one pupil may choose the same topic. Several pupils may collaborate in assembling material. Guide sheets which contain questions and references on the unit are provided to give direction and supervision for these individual studies by pupils. The teacher is always at hand to furnish guidance when needed. Testing for mastery is usually employed with this method of teaching.

In the unit plan, pupils work at their own speeds. After completing the minimum requirements, each pupil is given the opportunity to do additional work on individual or group projects. There is usually provision for a wide choice of topics for individualized problem units and assignments. Mastery tests covering the unit are given at the completion of the unit. In working out these individual units, attention must be paid to the degree of difficulty entailed, to the kind of study required, and to the types of problems and questions raised.

Work sheet materials facilitate assignments for individual work. They insure individual mastery of skills and save the time of the group for more creative activity.

Class work may be unified about a central project if the pupils meet occasionally in conference to discuss the progress they have made on their respective units and the contributions that each will make. Care should be taken in unit assignments to socialize, correlate and integrate the individualized assignments. Otherwise the pupils may miss values ordinarily derived from group work.

After completing minimum requirements, pupils can engage in additional work on the project in harmony with their individual interests. Failure is practically eliminated by providing specific assignments that are sequentially related.

During the individual work and laboratory periods the teacher may observe the child at work and point out errors. The classroom becomes a workroom. The teacher can give help on individual study difficulties while pupils are reading and collecting data on the assignment. Self-corrective practice materials may be used.

Instead of uniform time allotments for recitation and study periods there must be a more flexible daily schedule that is better adapted to the various projects and assignments the pupils undertake. Free budgeting of time should be practiced to allow capable pupils to follow their interests more intensively and at higher achievement.

levels and to give the slower learner more time for mastering new techniques

Unit teaching assignments are especially successful in such areas as science, social studies, manual training, and home economics

The Dalton Plan.—Helen Parkhurst originator of the Dalton Plan (29), regards it primarily as a means of providing "individual programs of study." The principal features of the Dalton Plan are freeing the individual child to work on his assignment, gaining efficiency through budgeting of time, and abandoning the fixed daily schedule. Each subject matter allotment is a large unit called a "job." This is ordinarily a month's work in all subjects. The "job book" consists of a set of mimeographed assignments or guide sheets in which is clearly indicated the work the pupil is expected to do. Each job must be completed before the pupil undertakes the next. Conferences are called when pupils reach certain points with their study. The instructor keeps laboratory graphs of pupil progress through the units. Provision is made for differentiation of assignments for varying ability levels. During work and laboratory periods, individual attention is assured as the teacher observes work, points out errors, and gives help on individual study difficulties. The classroom is a work room not merely a place to recite. Self-corrective practice material is used when necessary.

In the Dalton Plan there is correlation of assignments to provide integration in the pupils' work. By fusing departmental offerings the plan removes many of the customary overlappings in subject matter.

Individualized Materials

No more important question can be asked a teacher than this: Do the materials provided for the pupils in your class fit the full range of ability and attainment represented in the group? If a negative answer is given, then the possibilities of individualizing instruction have not been fully realized.

In attempting to meet each child's requirements, modern schools have utilized individualized materials—textbooks, workbooks, worksheets, pamphlets, and other study and self-help devices—to enable the children within a class to respond at different levels and to proceed at various rates. The materials available should be sufficiently challenging to appeal to pupils of widely varying ability, they should cover a wide range in content and difficulty, and should appeal to pupil interests.

In some classes where basic textbooks are commonly used, supplementary materials should be prepared by the teacher to meet individual requirements. The range of difficulty in the texts and supplementary materials thus supplied parallels the achievement levels represented in the entire class.

A highly organized system may be worked out in which children check their own progress and choose materials for each step in their work. These materials can be selected, filed, and checked off by the children themselves as they need them or finish working with them.

Adjustment Teachers Needed

The teacher's perennial dream is to have an assistant teacher who can relieve a difficult situation by occasionally taking charge of individuals or small groups who need closer supervision or more specialized instruction than the teacher of a large class can give. This dream is being realized in the larger city school systems where cadet teachers, teaching internes, or adjustment teachers are available. Some schools employ "quota teachers," one to every fifteen or twenty regular teachers, who are free to move about, helping with small groups and assisting pupils who present individual problems.

In several large cities, notably Chicago and Cleveland, adjustment teachers who have been given special training and are supervised by the Child Study Department are assigned to individual buildings to give added teaching service in the classrooms. In addition to working with small groups and individuals, the adjustment teachers can administer tests, confer with other teachers and with the principal and parents and serve in a variety of ways as an auxiliary teaching staff.

In 1936 Chicago introduced an adjustment teacher plan for supplementing the work of classroom teachers in the elementary schools. These teachers are trained to assemble all child study data, study each child and interpret his difficulties, select pupils for remedial teaching, prepare remedial instruction material, and assist with remedial teaching for at least 30 minutes every day. The number of adjustment teachers increased from 100 to 275 in the school year ending June, 1938. This work has been reported by William H. Johnson (24). E. V. Jacobs (23) has also described the work of the adjustment teacher in individualizing elementary instruction.

In other systems these auxiliary instructors are called helping teachers, one such teacher usually being assigned to a building. This teacher is provided with a room to which children from various

classes are sent during the day singly or in groups to receive instruction better adapted to their needs than that which they would receive in their regular classrooms. However the children retain membership in their regular classes and spend only a fraction of the school day with the helping teacher.

In some schools the kindergarten teacher holds only a morning session and in the afternoon helps in the primary grades as an adjustment teacher.

In the middle and upper grades the trend is steadily away from wholesale remedial work conducted by teachers and teaching assistants, and toward more individualized instruction for the slower learners as soon as their difficulties have become apparent. Individualized instruction in contrast to most remedial drill helps the slow learner progress at his own rate from his very first attempts to learn at school.

Methods of individualized teaching of the skills—reading, arithmetic, and spelling—have been described by the writer in several publications (21, 22).

The Contribution of Guidance Services

Within recent years specialized guidance and pupil adjustment services have been made available in many progressive school systems. Through these services teachers are furnished detailed information concerning pupil behavior adjustment and learning problems which enable them to work more effectively with individual problem cases in their classrooms. Connected with these bureaus and services are psychologists, social workers, visiting teachers, and medical specialists who understand pupil problems, are competent to diagnose difficulties, can recommend therapeutic measures, and can counsel the child and his parents. Intensive studies are made by these specialists of the more serious behavior problems and of retarded learners. Their findings are interpreted in nontechnical terms for classroom teachers.

Techniques employed by the personnel of such departments include diagnostic psychological studies, objective testing of aptitudes and achievement, observation of the child at work in the classroom or laboratory, conferences with children's parents and their teachers, case study conferences of the various specialists who have studied the child's problem from many angles, and improved individualized cumulative record keeping. In the high school these services are performed largely by counsellors and personnel workers who study

the child's problem as a whole in a way that subject teachers are unable to do in departmentalized teaching. The homeroom teacher, who assumes responsibility for the adjustment of a class group throughout the term, serves as the guidance counsellor for the group.

The ways in which guidance services can contribute to individualized instruction are described by Cecile Flemming (11) and by the author (20). The contribution of supervised study to individualizing the high school program is reported by P. R. Spencer (32).

Reaching the Exceptional Child

The Slow Learner—Approximately 20 per cent of the school population consists of mentally slow children who cannot keep up with school work organized for normal children of the same age.

(4) *Uniform curriculum standards resulting in continual failure* have, in fact, multiplied the slow learners' problems. Unable to handle formal textbook lessons, these children have tended to "sit" their way through school until they reach the age for leaving. One dull child, praised at the beginning of the term for some small accomplishment, said, "No one ever told me before that I did good work. I was always told mine was no good, so I never tried any more."

A teacher who has a third grade with 36 pupils has described several of the slow learners in the class.

Gifford, 13 A big boy, very quiet, who seems content just to sit. He cannot read, do number work or spell. He writes very poorly, but he draws well when allowed to draw anything he likes. He lacks ambition and initiative.

Allen, 11 A big boy, quite a "show off" and a bully. He cannot read, do number work, or spell. He writes very poorly, but he draws and does hand work quite well. He tends to upset the whole group if not closely supervised.

Victor, 13 A nice boy, quite big, who seems anxious to learn. He cannot read, is very weak in spelling and number work. He writes fairly well and is quite good at hand work and drawing. He is dependable.

Steve, 11 A brother of Victor and much like him.

Lucile, 11 A nice little girl, small for her age, who is always willing to help. She reads little and is poor in number work and spelling.

The teacher comments

My problem is how to reach these children. I do not feel that I can spend too much time with them at the expense of the rest of the class. Yet in a great many things they cannot be taught along with the others because they get nothing from the lessons. Allen and Gifford have already become quite a problem for the community, simply because they

have no interest in school and in previous years have attended only about half the time

These children can make little progress in a formal academic program. They can escape incomprehensible school tasks only by refusing to cooperate by withdrawing or by becoming mischievous. Since most of them will leave school without training that prepares them for life they will swell the number of society's misfits. Too often teachers bemoan the fact that these slow pupils cannot get the work. A truer comment would be that nothing has been provided which these pupils can succeed in doing. The school has contributed to the very problem it is eager to solve.

School Training for Slow Learners—There need be no essential difference in the educational philosophies that underlie work with dull and with brighter children. The principles of unified learning apply equally well to all learners regardless of deviations in learning capacity but the end products will vary with the children's abilities to learn.

Adjusting instruction to the dull pupils from the beginning of their school careers is more rewarding in the long run than attempting to apply remedial methods several years after deep seated inferiority feelings and apathetic attitudes have been formed.

Instead of regarding the dullard as an awkward nuisance who cannot fit into things the modern school makes it possible for him to learn by capitalizing on such abilities as he may have and discovering his interests. For the most seriously retarded cases special classes or schools are provided. For milder deviates any or all the methods described in the foregoing chapters are used.

Slow learners need a simpler and more stable human environment than is found in many schools (10). They require a great deal of firsthand concrete experience a sharp reduction in the amount of skill to be acquired and the number of facts to be learned at any period of growth activities in harmony with their mental level and interests less work with abstractions continual reference to and emphasis upon concrete experiences a reduction in textbook work and a curriculum centering about real life experiences.

Science of a popular and practical nature provides a good field for dull boys and girls in the middle and upper grades. Simple scientific experiments hold the children's attention and interest and provide concrete experiences and outlets for physical activity. Much can be done in this field without requiring the children to do extensive reading.

Health projects also can be both practical and interesting to dull children.

Slow learners need more continuous and consistent guidance in all aspects of their living than do other children. They need small tasks at which they can succeed. Children in one slow primary group became engrossed in word card games. For the first time they succeeded with something at school, though it was no more than picking out four cards all containing the same word. This gave them so much satisfaction that the teacher had no difficulty in advancing them to the next level in the games.

Improvement and growth must be visible to any child, but it cannot be if the task is beyond his grasp. There needs to be more experimentation with teaching methods that instill confidence and give feelings of security.

When slow learners are grouped for separate instruction the objective should not be "more and better drill" to bring these pupils up to "normal," but reorganization of class work on a unified activity basis so that all the pupils can experience success.

The Mentally Gifted Child

The highly gifted child is another deviate who needs different educational treatment from the average to prevent him from becoming a neglected resource. In the conventional school, grade acceleration or double promotion has been the usual policy for dealing with gifted pupils. Often, however, the evil effects of too rapid advancement have been recognized and nothing at all has been done for the gifted child. Yet how stupid it is to force a child who is able to read *Les Miserables* or *20,000 Leagues Under the Sea* to read third grade books just because pupils of his age are usually in the third grade!

For gifted children simply to be smart or clever at traditional lesson learning is not enough. The real challenge to their bright minds is a job that calls for creative thinking, for exploiting materials in new and untried ways, and for solving problems by unique methods. The school that does not place before the gifted child any greater challenge than a larger dose of routine lesson learning has failed in its duty to him.

Paul, a mature, alert, business-like little boy of seven who attends a large traditional type public school, recently gave an account of his school experience. He had stayed just one month in 1B and then was put ahead into 2B because of his obviously superior learning capacity. He explained that he read many books at home because

there were no books at school but the reader a book he had quickly finished. His major interests were arithmetic, history, geography and science—all the subjects that are usually difficult for middle and upper grade children. Of these he could scarcely tell which he liked best. When he was asked what he hoped to become when he was grown, he replied instantly with a note of determination in his voice, "A doctor." Paul hesitated when he was asked to draw. He apologized, explaining that he did not have drawing in his school and that he really did not know how to draw or paint.

Here is a child whose program might well be "enriched" with creative and expressive experiences without any need for immediate acceleration. This boy needs broadening experiences rather than more intensified learning in content subjects and the three R's. If the present policy is maintained at his present rate of acceleration, he will soon be with pupils several years older than himself. Without resources for expressing himself creatively, he may become unhappy, perhaps maladjusted.

When the gifted child is not given special attention, several problems may develop. The child may lose interest in his school work. If the work is too easy to challenge his best effort, why should he try? He may become bothersome or unruly in the school room for sheer lack of anything sufficiently stimulating to do. He may become lazy, developing habits of getting by with little effort that may interfere with his success in college or in his life occupation. He may not be given the time he needs for creative work and in consequence may fail to develop his creative powers to the fullest extent. If his school work seems futile, he may become nonsocial and overly introspective instead of developing normally in social relations.

With the unified program, the teacher need not accelerate the gifted child nor make artificial attempts to enrich an otherwise narrow program. Instead, the child can make contributions to the enterprises being carried on in as full and creative a way as his abilities permit. Under wise teacher guidance, the sky's the limit in what the gifted child may achieve in science, literature, the arts, and other school studies.

QUESTIONS AND TOPICS FOR STUDY

1. How can teachers become familiar with the range in ability and achievement of the pupils in their classes? Suggest several techniques to use for this purpose. Obtain and summarize such data for an actual class.

- 2 What significance do the facts cited here regarding individual variations in ability and achievement have for class assignments and schoolroom procedures?
- 3 Why is it important to consider differences in mental maturation when developing a school program for children?
- 4 Indicate the information a third grade teacher should have before beginning reading instruction with a class group A high school teacher before beginning instruction in science
- 5 What provisions should be made for individualizing instruction in a typical eight year elementary school? List a number of ways of individualizing instruction in the lower elementary grades In the middle grades In the upper grades In junior high school
- 6 In what ways can the unified program contribute to the individualizing of instruction?
- 7 Should children of similar ability be grouped together for instruction in the skill subjects? What are the arguments for and against ability grouping?
- 8 Observe and describe the ways in which instruction is individualized in some modern classroom
- 9 What are the current promotion practices in a school with which you are acquainted? How could these be improved?
- 10 What are some of the methods for dealing with the slow adolescent whose achievement has reached only fourth grade level?
- 11 What can be done to help the gifted child make better use of his abilities?
- 12 Write five additional questions or suggested exercises based on the chapter

REFERENCES

- 1 Anastasi Anne *Differential Psychology* New York The Macmillan Co 1937
- 2 Beck H *An Analysis of Relative Achievement in Mathematics of Slow and Fast Groups at the Junior High School Level* Ann Arbor Mich Master's Essay University of Michigan 1933
- 3 Bowen Genevieve *Living and Learning in a Rural School* New York The Macmillan Co 1944
- 4 Burt Cyril *The Backward Child* New York D Appleton Century Co Inc 1937
- 5 Carroll Herbert *Genius in the Making* New York McGraw Hill Book Co Inc 1940
- 6 Cornell Ethel L *The Variability of Children of Different Ages and Its Relation to School Classification and Grouping* Albany N Y The University of the State of New York Educational Research Studies 1937 No 1 Bulletin No 1101
- 7 Durrell Donald D Individual Differences and Language Learning Objectives *Childhood Education* 1936 12 149 151
- 8 Duffy Gertrude B and Durrell Donald D 'Third Grade Difficulties in Oral Reading' *Education* 1935 56 37-40
- 9 Engel Anna M "Characteristic and Significant Differences Between X and Z Pupils in the Detroit Public Schools" *Elementary School Journal* 1924 24 747 754

- 10 Featherstone, William B *Suggestions for Teaching Slow Learners* New York Bureau of Publications Teachers College, Columbia University, 1941
- 11 Flemming Cecile W *Pupil Adjustment in the Modern School* New York Bureau of Publications, Teachers College Columbia University 1931
- 12 Gesell, Arnold *Mental Growth of the Preschool Child* New York The Macmillan Co, 1925
- 13 Grant, Albert "An Analysis of the Number Knowledge of First Grade Pupils According to Levels of Intelligence." *Journal of Experimental Education*, 1938 7, 63-66
- 14 Hartshorne, Hugh and May, Mark. *Studies in Decent* New York The Macmillan Co, 1938
- 15 Hartshorne, Hugh May, Mark, and Shuttleworth, F K. *Studies in Service and Self Control* New York The Macmillan Co, 1929
- 16 Hildreth, Gertrude H *Learning the Three Rs* (rev ed.) Minneapolis Educational Publishers, 1947
- 17 Hildreth, Gertrude H "Hazards of 'Straight Promotion.'" *Educational Administration and Supervision* 1946 32 19 26
- 18 Hildreth, Gertrude H "Educational Provisions for Slow Learning Pupils." *Educational Administration and Supervision* 1939, 25 491 512
- 19 Hildreth, Gertrude H "Educational Achievement of Gifted Children." *Child Development*, 1938, 9, 365-371
- 20 Hildreth, Gertrude H "Guidance in the Lincoln School" *Teachers College Record* 1936, 37, 432-440
- 21 Hildreth, Gertrude H "Individualizing Instruction in Reading" *Teachers College Record* 1940 42, 124-137
- 22 Hildreth, Gertrude H "Individual Differences." *Encyclopaedia of Educational Research* W S Monroe ed New York The Macmillan Co 1941 596-601
- 23 Jacobs E. V "Individualizing Elementary Instruction Through the Adjustment Teacher" In *New Deal in Education* Pennsylvania University School of Education 1934, 489-492.
- 24 Johnson, William H "Adjustment Teacher Services in the Chicago Elementary Schools" *Elementary School Journal*, 1937, 37, 264 271
- 25 McFarlane, J W, Honzik M P, and Davis M H "Reputation Differences Among Young School Children." *Journal of Educational Psychology*, 1937 28 161-175
- 26 Odell, Charles W *An Annotated Bibliography Dealing with the Classification and Instruction of Pupils to Provide for Individual Differences* Urbana Ill University of Illinois 1923
- 27 Odell Charles W *Conservation of Intelligence in Illinois High Schools* Educational Research Bulletin Urbana Ill University of Illinois 1925 No 22
- 28 Palmer, Jasper T "Adaptation of Individualized Instruction to Class System of Organization" *Elementary School Journal* 1925 26 199 201
- 29 Parkhurst, Helen. *Education on the Dalton Plan* New York E. P Dutton & Co, Inc 1922
- 30 Proctor, William M *Psychological Tests and Guidance of High School Pupils* Bloomington Ill Public School Publishing Co., 1923
- 31 Schorling Raleigh *The Technique of Instruction for Dull Normal Pupils* Ann Arbor, Mich School of Education, University of Michigan, 1934
- 32 Spencer, P R "A Study Day" *School Review* 1925 33, 444-449
- 33 Stone, Clarence R. *Better Primary Reading* St. Louis Webster Publishing Co. 1936
- 34 Terman, Lewis M *Intelligence Tests and School Reorganization* Yonkers, N Y World Book Co, 1922.
- 35 Voegelien, L. Belle. *Annotated Bibliography on Adapting Schools to Individual Differences* Twenty fourth Yearbook of the National Society for the Study

- of Education*, Part II Bloomington, Ill Public School Publishing Co., 1925, 287-363
- 36 Ward M A and others *Data on Ability Grouping for the San Francisco State Teachers College*, *Twenty fourth Yearbook of the National Society for the Study of Education* Part II Bloomington, Ill Public School Publishing Co., 1925 154 159
- 37 Washburne, Carlton W ed *Adapting the Schools to Individual Differences*, *Twenty fourth Yearbook of the National Society for the Study of Education* Part II Bloomington Ill Public School Publishing Co 1925
- 38 Winsor A Leon The Relative Variability of Boys and Girls' *Journal of Educational Psychology*, 1927, 18 327-336
- 39 *Meeting the Special Needs of the Individual Child* *Nineteenth Yearbook of the Department of Elementary School Principals* Washington National Education Association 1940
- 40 New York City Board of Education. *Review of Departmental Experiences in Dealing with Problems of School Maladjustment* New York City Board of Education Bulletin, No 28 July, 1937
- 41 *A Study of Negro and White Pupils in Piedmont North Carolina* Special Bulletin No 16 Raleigh N C Department of Public Instruction, 1938

Chapter 23

THE TEACHER'S PART IN THE GUIDANCE OF LEARNING

It is almost impossible to overestimate the influence of a good teacher. No other element of the educative process is so essential as the services of a competent adult to guide children in learning. Even the best methods may fail without a good teacher because the success of any method depends upon the teacher's ability to work with children.

If education meant no more than imparting information such mechanical devices as the radio and motion pictures might suffice but in the fullest sense teaching requires personal relationships between the pupils and their instructor. Good teachers have always sought to draw out their pupils to stimulate them to think things out for themselves and to arouse in them new interest in things and ideas that they might not otherwise have had.

As Ruth Strang has remarked, "The teacher makes a most important contribution through his personality and example, his skill in teaching, his relationship with the pupils, his contacts with the parents, his influence on the curriculum and policies of the school, his understanding of the needs and abilities of each child, and the provision he is able to make for these needs and abilities." (16)

The Newer Conception of the Teacher's Job

The trend toward unified methods has expanded the teacher's role. In fact, the teachers themselves, through their resourcefulness and ingenuity, have created a new role and are largely responsible for the success of the new methods.

Teaching is at once a profession and an art. The expanding role of the teacher in the modern school includes among other functions the following:

- Participating in curriculum planning and in program making
- Preparing and collecting teaching materials
- Developing with the pupils the school experiences that will enable them to achieve their objectives

- Selecting textbooks
- Imparting subject matter
- Instructing pupils in skills
- Integrating each year's classwork with that of previous years
- Establishing and maintaining classroom morale
- Maintaining hygienic conditions in school and classroom
- Participating in school management
- Collecting information about pupils and recording evidences of child growth
- Advising parents about home guidance of children
- Coordinating activities of the class with other classes in the school and with those of special teachers
- Functioning as educational leaders in the community

Who Should Teach Children?

Anyone who undertakes to carry out this broader conception of teaching needs certain qualifications that can be summarized as interest in children and knowledge about them, ability to work cooperatively with children, knowledge of subject matter, ability to impart information, capacity for directing children's activities, ability to work with other staff members in the school and with the parents, and understanding of community conditions and problems

The good teacher is genuinely fond of children, believes that they are important, is able to see the world through their eyes, and has the capacity for taking pains with them. The most effective teachers are those who observe closely and consult with the children in order to understand them better and to work with them more successfully. Patience, sympathy, and quick insight are essential for competence in teaching.

A school principal recently described the effective teachers on his staff as a group of ever growing, open minded, honest, kindly, cultured individuals who had the highest aspirations for the pupils, saw their potentialities, and delighted in observing their minds unfold and their personalities develop. These teachers were well rounded well integrated people who showed a zest for life. William Lyons Phelps was inclined to place an attractive personality even ahead of efficiency as a qualification for successful teaching.

The Teacher's Role in Child Guidance

The observation is frequently made that the modern teacher's task is to teach children not subjects.

In traditional teaching, dictatorial, coercive methods often went hand in hand with rote learning and arbitrary assignments. Auto-

cratic methods were usually deemed essential to enforce discipline and to conduct drill. Under these conditions there could be little friendliness between teacher and pupils. There also was a tendency to put textbook knowledge ahead of child welfare. The methods stressed 'questions and answers' rather than guidance in the learning process in all its aspects.

Today, in the better schools, teachers view their task more broadly as they seek to guide the growth of a well rounded character and personality in every individual in their charge. Teachers in such schools look upon their pupils more as responsive partners than as troublesome, recalcitrant youngsters who must be kept firmly in hand. A good teacher is a friend and counselor in whom the children confide and whose advice they seek.

Children are no longer considered "good" and "bad" by sympathetic teachers but their behavior is understood to be the result of many complex factors. The good teacher seeks the causes motivating each pupil's behavior, shows concern for each child's total welfare, and helps each one to attain the satisfactions that lead to happy living and stable adjustments. (See Chapter 20)

A teacher, through a little quiet observation or informal conversation can learn much that will advance his understanding of children and give him added confidence in redirecting behavior. What stages has the child reached intellectually, socially and emotionally? What are his specific requirements at a particular time? Has he limitations to be considered, removed or corrected? Has he special talents to be fostered? The teacher can soon discover facts that will answer these questions.

The clever teacher is sensitive to children's problems using casual contacts wisely to discover difficulties and make suggestions. This cannot be done successfully unless the teacher has the child's full confidence.

The up to date teacher believes in the democratic concept of respect for individual differences. His teaching emphasizes the value of individual contributions. In a certain school one boy was good only at riding his bicycle backwards. This boy won a 'backward riding' race, which the teacher staged to give him a chance to achieve success and the other children an opportunity to appreciate this child's distinctive accomplishment.

The Teacher and Human Relations

'Respect for the pupil' was Emerson's simple recipe for successful teaching. Good teaching involves teamwork between pupil and

instructor, which is possible only when a friendly, congenial relationship exists between them.

Several students who were visiting in a high school noted for its modern methods confessed that they were amazed when they saw pupils chat with teachers as they walked along the halls together. Such a thing never happened in the conventional type of school they attended. They were also astonished when they saw teachers and pupils working together on friendly footing in the classroom.

A refugee lad who was enrolled "for the duration" in a modern school in the United States commented: "What I like about America is your school teachers. I say, they're really human beings. Why, they could even be your friends." In his own country the boy had been instructed only by "stand-offish," dictatorial school masters.

A student teacher working in a modern school said, "It's so pleasant to be in a school where teachers are more like real people working together, with all the children and teachers engaged in worthwhile projects; there's freedom and informality, yet each person takes responsibility for his share. Life in this school is really dynamic, more like real life, because the teachers create such an atmosphere."

In a school emphasizing drill on subject matter, teachers usually find it difficult to act naturally in their relations with the children.

Tommy, a fifth grader in such a traditional school, was asked by his teacher to stay after school one day to do a few chores. Cheerily and quickly he cleaned the blackboards, watered the flowers, and tidied the shelves.

"Thank you, Tommy," said the teacher, "You did that very nicely. I only wish you were as cheerful and willing during school hours."

"Do you know, teacher," said Tommy, "that is just what I was thinking about you."

At another time he said, "I always thought teachers weren't my friends, and I never talked with them before for fear of being called 'teacher's pet.'"

A young girl who appreciated her teacher's sympathetic attitude wrote the following comment when she was encouraged to write on any topic she chose: "My best friend is Miss C. [the teacher]. She has blue eyes and brown hair. She is very nice to all the other children and me, too. I like her very much."

One jolly teacher, whose name was Miss Nolan, said, "The youngsters all call me 'Noly'; we all seem to be such good pals. There is a friendly intimacy among us. We express affection openly for each other."

Another child referred to his teacher as a "good guy" because he considered that she was fair to all the class

Miss S a pleasant third grade teacher, received the following appreciative note from Jimmy B her erstwhile pupil while both were on summer vacation

' Dear Miss S Thanks for your postcard I miss you lots I like camp and swimming I hope you are having a happy time
Jimmy B "

One teacher commented 'I want to establish myself as a friend and guide of the children not as a rigid disciplinarian I want to have the children come to me as a friend for help and advice to tell me their troubles and to invite me to their homes This teacher sought in every way to gain the child's confidence and cooperation

Human relations in teaching are advanced when these attitudes extend to the parents as well as to the children Good teachers seek to understand the child in terms of his home and family background and strive in every way to inspire confidence in the parents (Methods of building better school and home relations have been described in Chapter 21)

In speaking of teacher pupil relations Mary Lyon once commented One has not governed a child until she makes the child smile under her management' Wise teachers realize that success in teaching depends upon the teacher's ability to create a pleasant atmosphere Better teacher and pupil relations can be built if teachers use part of the day to have fun with the children When teachers and pupils laugh together friction tends to subside Good teachers can see a joke and laugh with the children

Teachers can be more relaxed in the modern school because children assume more responsibility for their own acts because there is less straining to achieve impossible goals and because there is more friendly cooperation among the group and a more sympathetic mutually congenial relationship between teacher and pupils

Dorothy Baruch finds that the teachers who are most successful with children are those who give them plenty of loving affection let them make their own choices as often as possible share their enjoyment in activities listen to what they have to say give them a chance to relieve emotional tension by giving expression to their feelings and permit them to experiment with materials without reproaching them for being messy (2) Good teachers accept actions and expressions that are typically childlike

Pupils learn better with a teacher who is calm in voice and manner and who brings a well balanced personality to the classroom. Unfavorable emotional states, like measles, are catching.

The Teacher as a Guide to Learning

The poet Goethe remarked, "Teaching does much awakening and arousing, still more." A teacher cannot learn for the child. Learning is self activity. The teacher's task is to stimulate the children to learn and to direct the activities that will help them learn. This kind of teaching calls for more skill than is needed to tell each child exactly what he should do.

According to Susan Isaacs (8), the teacher's role is to call forth spontaneous activity and to utilize it when it arises, to help children solve the problems in which they are actively concerned, not to foist upon them problems that are unrelated to their world and interests. The teacher should create in each child a desire to learn by providing choices for him to make and allowing him freedom to work out his plans.

As a guide to learning, the teacher can stimulate the child's thinking about problems that arise in life situations, direct his thinking about pertinent questions and problems in his daily experience, help him find source materials, and show him how to learn through experimenting.

The teacher should be sensitive to the child's ideas and suggestions, select the most promising leads, stimulate the development of new interests, and help in planning work. The teacher should demonstrate how to find information, how to use materials, and how to make things. He should show each pupil the best ways of practicing to improve skills and to appraise results. The good teacher overcomes the temptation to follow the easy course and to "tell all." Instead he encourages the pupils to reach conclusions for themselves and directs them in making choices of problems to study, of methods and resources to use, and of alternative plans to follow. The wise teacher knows when to step aside so that the group can go ahead with its own planning.

A teacher in a progressive rural school, describing his role in the unified program, said that he acted chiefly in an advisory capacity, giving his opinion when requested, and patiently trying to direct the combined classroom thought and action into the proper channels. His class was a busy workshop with the teacher giving help unobtrusively wherever it was needed.

Teachers and Pupils Learn Together.—When pupils were required to learn everything so that it could be recited 'by heart, teachers could easily 'keep ahead' of their pupils and make authoritarian pronouncements based on the required text. The best teachers today, however, seek to raise questions in the children's minds. When children are urged to find problems within their experience, the teacher can drop the role of sole authority. In fact, no honest teacher could claim to know more than the children about every phase of their exploratory work. When the children collect authoritative information to answer questions, the intelligent teacher is proud that the children, under his guidance, have learned to discover facts for themselves and to report them in intelligible fashion to the class.

In the modern classroom the teacher learns along with the children. In fact, no other way would be practicable with a program that develops from day to day and in which new problems wholly unanticipated by the teacher, constantly arise. With the traditional method, the situation was just the reverse because the teacher controlled in advance every problem that would arise, specified all the sources to be used and knew the answer to every question to be put to the pupils. The newer tendency for teachers and children to work together is truly an excellent thing whether the task is learning about South America or improving handwriting because the teacher comes down to the child's level and shows him how a mature person attacks a problem.

The good teacher does not presume to be a specialist in all departments of knowledge. Instead, he guides pupils in their search for knowledge and helps them to equip themselves with the techniques by which they can learn. He is never reluctant to admit honestly, "I don't know," when children raise a difficult question but in such a case proceeds to show them how to find the answer.

The able teacher continually looks up information with the children. It is a good idea for teacher and pupils to study together on some topic so that the children can see how the teacher locates, selects and organizes the facts. The pupils may forget most of the facts but they will have learned the much more important process of how to find them. This technique is valuable at all ages and could be begun in the kindergarten.

Teachers who have broad training in all phases of their profession rather than narrowly specialized preparation in one field are in a better position to organize teaching in terms of unified projects or curriculum units. The teacher who has average competence in social science, the physical sciences, mathematics and arts and crafts has a

better chance of succeeding with unified teaching than one who is narrowly specialized in a single field, such as arithmetic, and knows little else. Below the high school level, even the arts and crafts fields do not require a high degree of specialization before the teacher can guide children's learning in these areas. However, teachers who have lacked aesthetic experiences themselves may fall short. Teachers should be able to sing, paint, dance, model in clay, dramatize, design clothes, and write poetry to appreciate the child's urge toward creative work and to direct aesthetic experiences at school.

Teacher Cooperation in School Management and Curriculum Making

There is no greater contrast between the old and new in educational practices than the trend toward greater teacher cooperation in school management, program making, and curriculum planning. Under autocratic school management, teachers had little voice in deciding school policies. Even class management was dictated by rules and regulations imposed by their superiors. The curriculum was largely controlled through courses of study imposed on teachers from above, and all texts were prescribed in advance.

What progress has been made within a few decades! The shackles have been taken off. Modern school and classroom management exemplifies the principles of democratic living that characterize our national and civic life. The teachers, who are chiefly responsible for the child's education, now can share in planning and cooperate in school management. Planning committees and policy establishing councils, consisting of teachers and administrators elected by the entire staff, are being established. The conference method is frequently used in establishing school policies and in developing the educational program. The teachers themselves often help formulate courses of study, select instructional materials, plan daily schedules, and arrange for and conduct professional meetings.

Teachers need to confer with one another, to pass on information and records of experience, and to exchange ideas about methods. In one summer education workshop, teachers testified how helpful it was to confer with other experienced teachers about their common problems (7).

Teacher and Pupil Cooperation in the Classroom

Democracy operates in the classroom if there is a cooperative relationship between teacher and pupils. In the traditional school, the

lessons were chiefly textbook selections to memorize and every detail in the course of study was planned in advance usually by persons other than the teacher with no special reference to the children in a particular class. The rules to be observed in classroom procedures were dictated by the administration. Departmentalized subject teaching permitted no opportunity for several teachers of the same child to confer. Pupils had no voice in making plans or selecting study projects.

Unified teaching requires constant group planning and coordinated effort on the part of teachers and pupils because the program in its very nature must be flexible. The teacher in the new school is encouraged to plan as freely as necessary unhampered by a set program and he is free to make adjustments in teaching and scheduling to fit the children in the group (14)

The Teacher as a Learner

The good teacher never stops learning. When he ceases to learn he should cease to teach. Part of his job is to keep his mind replenished with new ideas. So long as the world changes teachers will need to keep posted on world affairs and to keep up with scientific developments in order that they may keep abreast of their wide awake students. Many a new teacher has stood aghast on discovering

Those youngsters actually know more than I do! Many a teacher has been assured by a ready student: "I'll tell you all about it, or I'll show you how it works." A group of teachers recently requested a course in aviation in order to keep up with their pupils' growing knowledge of the subject.

Now that we have entered the Atomic Age teachers must feel challenged more than ever to try to understand the great technological advances that this age promises to bring forth. Otherwise they will scarcely be in a position to guide the learning of children who are destined to shape world affairs.

The Teacher's Preparation

The broader conception of teaching outlined in these pages cannot be realized unless teachers are more fully equipped for their responsibilities than they have been by conventional courses in pedagogy and specialized teaching fields. To undertake their new role teachers will require thorough pre-service and in-service training which will emphasize the relationships among various areas of knowledge and skill. Otherwise they may fail to see the possibilities for integration

in their own teaching. Teachers also need to do more learning through experimentation and firsthand contacts. The multiplicity of specialized courses and the textbook emphasis in most teacher training centers scarcely provides the background needed by teachers who expect to use workshop methods with their pupils.

Self-Appraisal

The teacher would do well to make an occasional self-appraisal by asking himself, "Is my teaching a satisfying and rewarding experience?" If the answer is "No," then the teacher should try to discover where his shortcomings lie. Perhaps he will decide that he belongs in some other occupation.

Traditional, narrowly conceived teaching practices appear to be, not the product of any one period in time, but rather a reflection of the individual teacher's viewpoint with regard to his functions. Each new generation calls for a reaffirmation of faith in the broadly trained teacher who has the insight and resourcefulness to provide creative learning experiences for children at school.

QUESTIONS AND TOPICS FOR STUDY

1. What are some of the characteristics of a successful teacher judged in terms of modern school practices?
2. Describe how the conception of the role of the teacher in the modern school is changing.
3. What are the qualities to be sought in teachers who are to direct the learning of children in modern schools?
4. Of what importance is a teacher's personality in working with children?
5. Indicate any contrast you see between the teacher's functions in the traditional and in the new type of school.
6. What can teachers do to further good human relations at school?
7. Does teaching by unified activity methods require more ability, more originality, and broader background on the part of teachers than teaching separate subjects? Explain.
8. Describe instances of the teacher's "learning along with the children."
9. In what ways can a teacher encourage and help children to find out things for themselves?
10. To what extent should teachers participate in school management outside their own classrooms?
11. Should there be more men teachers in our schools? Explain the reasons for your answer.
12. What preparation do teachers need for handling the unified program effectively?

13 Write five additional questions or suggested exercises based on the chapter.

REFERENCES

- 1 Adams, Fay *Educating America's Children* New York. The Ronald Press Co 1946
- 2 Baruch Dorothy "More Teacher Training Wanted." *Journal of Consulting Psychology*, 1944 8, 323-326
- 3 Baxter, Bernice *Teacher Pupil Relationships* New York The Macmillan Co., 1941
- 4 Brumbaugh, Florence "The Place of Humor in the Curriculum" *Journal of Experimental Education*, 1940, 8 403-409
- 5 De Lima Agnes, Baxter Tompkins, and Francis Thomas J *South of the Rio Grande* New York Bureau of Publications Teachers College, Columbia University, 1942
- 6 Foster, Josephine C *The Children in Our Schools* Minneapolis University of Minnesota, 1941
- 7 Hildreth, Gertrude H "A Short 'Refresher Course' in Childhood Education." *School and Society*, 1944 59, 397-398.
- 8 Isaacs, Susan *The Psychological Aspects of Child Development* London University of London, Institute of Education 1935
- 9 Jersild, Arthur T., Goldman, Bernard, Jersild, Catherine L. and Loftus John J "Studies of Elementary School Classes in Action. II Pupil Participation and Aspects of Pupil-Teacher Relationships." *Journal of Experimental Education*, 1942, 10, 119-137
- 10 Jersild, Arthur "Characteristics of Teachers Who Are Liked Best and Disliked Most." *Journal of Experimental Education* 1940 9, 139-151
- 11 Lane, Robert H *The Teacher in the Modern Elementary School* Boston Houghton Mifflin Co., 1941
- 12 Loftus, John J and others "The Activity Program in the New York City Schools" *Journal of Educational Sociology* 1943 17, 65-124
- 13 Meredith, Lois A "Teachers' Personalities and the Problems of Children." *Journal of Educational Sociology*, 1934 7, 387-396.
- 14 Porter, Martha. *The Teacher in the New School* Yorkers N Y World Book Co., 1930
- 15 Rhind, Flora M "The Teacher and Zestful Living" *Harvard Educational Review*, 1941, 11, 424-430
- 16 Strang, Ruth "Every Teacher's Records" New York Bureau of Publications, Teachers College Columbia University 1936
- 17 Watson, Goodwin Cottrell Donald P., and Lloyd Jones, Foster M. *Redirecting Teacher Education* New York Bureau of Publications, Teachers College, Columbia University, 1938.
- 18 California Curriculum Commission. *Teachers' Guide to Child Development in the Intermediate Grades* Chapter 3. Sacramento California State Department of Education, 1936.
- 19 *Changing Concepts and Practices in Elementary Education* Board of Superintendents Division of Elementary Schools. New York Board of Education 1942.
- 20 *Course of Study for Virginia Elementary Schools, Grades 1-11* Richmond State Department of Public Instruction, 1943
- 21 "Mental Hygiene of the Teacher" *Educational Method*, February, 1942, 21 Entire issue
- 22 *What Education Our Money Buys* Educational Conference Board of New York State Albany. the Board, 1943.

Chapter 24

EVALUATION OF RESULTS WITH THE UNIFIED PROGRAM

How well do unified methods based on organized learning principles work when subjected to the test of classroom experience? Four lines of evidence furnish proof that the newer methods, which feature learning through experiences, workshop methods, a unified program, flexibility in planning, and a richer school life for children, achieve results that are generally more satisfactory than do more conventional methods with their limited objectives. These lines of evidence are

- 1 Modern research into the nature of the learning process and the data on child development referred to in Chapters 3 and 4
- 2 Testimony of experienced teachers who have tried alternative methods and who have pioneered in vitalizing the educative process for children
- 3 Data on progress made by pupils in schools organized around the new learning principles compiled from records of graduates from these schools
- 4 Comparison of outcomes resulting from experimental and conventional methods

Testimony of Teachers

An elementary school teacher who had tried the newer methods for a year found that the pupils of that year retained knowledge longer, showed more self discipline, were able to use tools and materials better, and developed a wider range of talents than pupils who had followed a conventional program. They were more cooperative, developed broader viewpoints and wider understanding, and took more interest in their school work.

Teachers at the Lincoln School of Teachers College reported growth in the children's feelings of personal security, ability to work together cooperatively, development of new interests, understanding of the community in which they live, and mastery of the tool subjects and skills as shown by test results and by achievement observed in the classroom. There was evidence of improved standards of work and

a creative approach toward their work (28) Similar results were reported by Margaret Gustin and Margaret Hayes as a result of their work with public school children in the elementary grades (11)

Teachers usually find that the unified program is attractive and deeply satisfying to the children Pupils seem more eager to participate when they find that their plans and ideas count for something They work earnestly because they are keenly interested in the activities they have undertaken External pressures are less frequently needed to hold them to their best achievement

In their work with slow learners Josephine Wright and the author (15) found that the pupils were happy and responsive when unified activities were made the center of the curriculum Children developed favorable attitudes toward learning with a resulting decrease in behavior difficulties they gained in self-confidence they really wanted to come to school and they reported at home their enthusiasm over each day's activities The pupils succeeded well because the program utilized the drive that comes when effort achieves tangible results Shy children were drawn out by a program that offered something each one could succeed in doing Aggressive children found in the varied activities outlets for their energies and legitimate opportunities for leadership Discipline problems abated when children were engaged in absorbing work that left little time for mischief Motivation through threat of punishment and competitive rivalry was rarely needed The new janitor in a school where learning activities centered in organized units and lifelike experiences commented This is the first school I've ever worked in where there was no vandalism

The unified activity program can give training in independence and responsibility A rural teacher who conducted such a program was delayed for several hours one morning When she arrived at the school shortly before the noon hour she found the entire class busily at work One third grader was conducting the children of the first grade on a tour around the school yard pointing out the different trees and describing each kind Inside pupils of Grade III were making a log house as a phase of their project on pioneering and Indian life Grade II was reading a story under the supervision of an older child The children had played games and sung songs and had conducted their drill in number work themselves The teacher thought this spoke well for the leadership and group spirit that children can achieve through the unified program

Teachers have reported that unified activities actually economize the children's time because they have a longer period in which to 'warm up' to a task and can accomplish more through continuous

effort after they are well started than is possible in short, isolated study periods.

High school teachers have reported that they have more to build on when their students have attended elementary schools organized on unified teaching principles. The pupils have learned how to discover things for themselves, how to use reference materials, how to compile reports, and how to evaluate their findings.

Testimony of the Graduates

The graduates of an experimental school which featured the unified program in the elementary grades and integrated courses in high school were asked to appraise the results of their training. The question asked was: "Of what advantages and limitations were you aware?" (14).

The advantages of the methods used were reported to be the stimulating atmosphere of the school, independence, opportunity for self-expression, sympathetic and understanding teachers, superior opportunities for social contacts, wide student participation in affairs of the school, time for experimentation and creative work, and opportunity for individual adjustments in courses and assignments. Limitations indicated were shortages in factual information of the sort needed in freshman work in college, lack of knowledge of formal grammar needed in foreign language study, and lack of skill in punctuation needed in college freshman essays.

These graduates felt that they had gained attitudes and skills that enabled them to keep on learning after school days were over.

Objective Studies and Surveys

During the past few years results of controlled experiments with the newer practices compared with formal teaching have been reported.

A summary of evidence from comparative studies of formal and nontraditional schools, made during the past 25 years, has been prepared by G. Derwood Baker and his associates (1). Data are cited for the Lincoln School, Teachers College, Columbia University, and the public schools of Houston (Texas), Roslyn (New York), Santa Monica, Pasadena, and Los Angeles (California), and other places. The publication contains a bibliography of sixteen titles.

One finding is that pupils learn basic skills as well in a unified program offering less formal instruction as they do where instruction in skills is more direct, intensive, and time consuming.

Data obtained at the Lincoln School of Teachers College, New York, showed good results for achievement in skills measured by the Stanford Achievement tests when compared with country wide norms, especially in the middle and upper grades. The table on page 420 shows results for one year, the test having been given in October when the expected country wide norms in terms of grade scores for grades II, III, IV and above would be 21, 31, 41, etc. Even when the higher average I Q of the Lincoln School group was taken into account, the results were still good. The Lincoln School pupils in the intermediate and upper grades were somewhat younger than the pupils on whom the tests were standardized. The data in the table are based on results for about 40 children in each grade level.

A study of outcomes at Miss Elizabeth Irwin's school in New York City showed similar results for the same tests (17). Achievement test scores for an experimental group of eighteen sixth grade children who began the study of skills a year and a half later than is usual and who worked on them in connection with unified projects for about an hour and a half a day through the fifth grade and two hours a day in the sixth grade, were compared with scores for a control group having a similar median I Q who began the customary program in skills in the first grade and devoted most of their time to academic subject matter.

The results of the comparison in terms of mid scores on the Stanford Achievement test were as follows

	<i>Experimental School</i>	<i>Control School</i>
I Q derived from intelligence tests	120	117
E.Q (Educational achievement with age held constant)	115	112
Arithmetic computation score	126	120
Arithmetic reasoning score	78	74
Reading total score	163	162
Spelling	132	133

The experimental group had been given no formal training in spelling.

The children in the experimental group were equally well prepared to meet the technical requirements of the junior high school and in addition they had had invaluable experiences in literature history, art and music.

The superiority of the project method over subject teaching in the amount and value of the learning that took place in elementary school classes was established in the 20's by Elsworth Collings (5).

J W Wrightsone (32-36) found that pupils trained in new type schools were equal or superior to those attending conventional schools.

STANFORD ACHIEVEMENT TEST RESULTS
Lincoln School of Teachers College Grades II VIII
October Scores

Grade	Grade score—country wide norms	Reading grade score	Arithmetic reasoning grade score	Arithmetic computation grade score	Spelling grade score	Science grade score	Social studies grade score	Total grade score	Total score—educational age	Median mental age	Median chronological age
II	21	23	31	30	28			31	8.2	9.6	8.1
III	31	32	51	40	45	55	62	49	10.6	10.8	9.0
IV	41	60	57	50	51	61	70	63	11.1	12.1	10.3
V	51	72	70	58	69	79	81	74	12.8	13.5	11.2
VI	61	88	85	79	80	90	88	88	13.10	14.4	12.1
VII	71	10+	10+	88	88	93	97	92	14.8	15.6	13.0
VIII	81	10+	10+								

in knowledge of facts and information generally superior in personal adjustment and in civic and scientific attitudes and definitely superior in cooperation in sense of responsibility and in initiative

In general the evidence appears convincing that the new methods do not result in a loss of academic proficiency in the usual skill subjects and that there is a definite gain in terms of initiative skill in dealing with problems knowledge of contemporary world affairs and social participation Furthermore the children doing unified activity work have shown higher social competence than those trained in formal schools where these areas tended to be neglected The newer practices have provided greater opportunities for responsibility both in and out of school and actual gains in the pupils ability to handle practical problems have been found The weight of evidence therefore is in support of the newer educational practices as described in this book

The New York City Experiment.—In 1935 New York City set up an experiment in 63 public school classes to test the value of the activity program and the unified curriculum as contrasted with the formal program that had prevailed for some years The survey was conducted in conjunction with the State Department of Education and was evaluated by a thorough research program carried on for six years The kind and amount of activity in the new type classrooms was measured parents attitudes toward the program were surveyed children's attitudes and behavior were comprehensively investigated and children's growth in many programs was measured both by standard tests and newer appraisal techniques

From observations made in elementary school classes (experimental and control) four times during a four week period it was found that the activity classes devoted more time to arts crafts poetry dramatics and use of the library but the time spent on skill subjects was between 70 and 80 per cent of the time devoted to those subjects in the control classes

Results of the survey published in 1941 showed that the experimental program featuring activities workshop methods and unified teaching was as effective as the older methods in developing desirable social attitudes in the pupils in stimulating their interest in cultivating their ability to think clearly in developing their initiative and in helping them to master fundamental knowledge and skills The children in the experimental school program were definitely superior to the controls in scientific outlook self-confidence and poise social behavior, creativeness proficiency in the language

arts, arithmetic, social studies, handicrafts, reading, and fine arts. They also showed a greater diversity of interests and more ability to work at tasks on their own initiative (27, 36)

Robert Thorndike, John Loftus and Bernard Goldman (29), who conducted the survey, observed more teacher questioning and pupil answering in the control classes than in the experimental. The activity classes showed more student leadership, more productive work in writing and art (whether sponsored directly or indirectly by the teacher), somewhat more semi independent and independent activity, more giving and taking of help, and more communication between pupils. Observations of excursions showed that the activity program produced some gain in the ability to maintain discipline in out-of-school situations and possibly other gains in the degree of interest, participation, and social responsibility.

As a result of the outcomes from these six years of experimentation, New York City introduced in 1942 the unified experience curriculum in the lower grades for 600,000 children, with the expectation of extending the new methods to all the elementary grades.

In an experiment conducted in primary grades in London schools reported by D E M Gardner (8) similar results were found. Four experimental (free activity) schools were paired with control schools of a corresponding social level in which teaching was of a formal type. The children tested were paired for age and intelligence. Tests were given when the children were six years old and some were repeated a year later. Results of this study demonstrated that the children in the experimental schools performed better on imaginative and constructive tasks, showed more initiative in tasks involving concentration (whether the activities were self chosen or selected for them) even when not intrinsically interesting, and worked better on tasks demanding self confidence. Their social behavior toward adults and toward each other was more cooperative. They did as well as the control children in formal educational subjects and in tasks involving neatness, and they showed general superiority in liveliness and keenness which was reflected in all their work.

At the Speyer School (38) an experiment with slow learners was carried on with unified projects which involved learning by observation, visitation, and discussion, by carrying on various artistic, and dramatic activities and by using pictures, construction activities, sound motion pictures and other devices to supplement textbooks. Results showed that the newer practices did not handicap the children in any way. They learned as much in the content subjects as equiva

lent groups taught by conventional methods. In many respects the newer methods were of great benefit to these slow learners.

The value of the newer experimental practices in education has been demonstrated still further by results from 154 studies summarized by John Leonard and Alvin Eurich (20). Seven chapters of this publication present a critical summary of reliable studies that have been undertaken to appraise the newer educational practices. The results of these experiments proved that the pupils had gained the ability to acquire and apply facts and principles, had developed social attitudes, and had grown in their command of basic skills in physical fitness and in personality. At the same time satisfactory results were attained in the mastery of content material.

Clarence W. Hunnicutt (16) compared the reading achievement of pupils having activity and project work with the achievement of those following conventional courses. The children in the activity schools had read more books and they had borrowed more books from libraries. They had also done more reading just for fun at the suggestion of friends. The children in conventional classes had read more "series" books. The differences in the quantity and quality of magazine and newspaper reading favored the activity program. The children in the activity program had read more; they had read more widely, and they had read a better class of material. The conclusions from this study were entirely favorable to the unified program.

These comparative studies prove conclusively that

- 1 The newer methods tend to promote better personal and social adjustment and development.
- 2 The newer methods result in no loss in academic achievement but produce gains in knowledge of contemporary and world affairs.

I. Keith Tyler (30) found growth in spelling satisfactory when elementary school pupils learned their spelling in connection with social studies rather than through drilling on spelling in the conventional way. The free composition work the pupils did as part of their social studies required them to develop a broader vocabulary than pupils in formal classes.

Comparative studies in arithmetic learning (2, 12, 13, 24) prove the adequacy of learning arithmetic incidentally and indirectly in the primary grades.

The Aikin Study.—In 1933 30 secondary schools were selected by a committee of the Progressive Education Association under the

leadership of Dr Willard Aikin, to introduce, as an experiment, a series of integrated courses in place of the traditional academic subject curriculum. Colleges agreed to accept recommended graduates of these schools even though the students' records did not show the accepted units customarily required for college entrance. Many students who were in the ninth grade or freshman year in high school when the experiment was begun, had graduated from college when it was finished. Records were kept of growth made by students under the new program during the high school years. The progress made in academic work, contribution to college life, and other traits by selected students who attended college was also studied intensively. Certain students were matched with those of the same sex and comparable ability who had graduated from high schools offering traditional courses. College marks and amounts and kinds of participation in campus affairs were compared. It was found that the average grades of the experimental group in college exceeded the control group by a slight amount. In intellectual competence, in success in other areas of college life, and in ability to achieve personal goals the experimental students were almost uniformly superior by a small but consistent margin. They were not handicapped in their college work as a result of following new type courses in high school, in fact students from the high schools that departed more radically achieved distinctly higher standards. In general, the experimental group non-traditionally trained showed superiority over the control group in the fluency with which they expressed their ideas, in their creative contributions, and in their participation in affairs of an intellectual nature (37).

Graduates of the six most progressive schools achieved far more at college in all respects than the graduates of traditional schools with whom they were compared (4).

Ronald Lippett and his associates at the University of Iowa studied three types of classroom organization, one described as democratic, one as autocratic, and one as 'laissez faire'. They concluded that under a dictatorial system children were quarrelsome, sullen, and destructive, or else submissive, repressed and apathetic. Under 'laissez faire' anarchy prevailed, and children were restless, squabbled engaged in horseplay, and accomplished little. Under the democratic system children were friendly, cooperative, and independent and showed initiative and a sense of responsibility (21). They were able to carry on their activities successfully when supervision was lacking.

Techniques of Classroom Evaluation

The techniques used to evaluate outcomes from the experiments reported here are described in detail in some of the reports. Some of them are techniques that teachers can use in appraising the results of their classroom procedures. These methods include

Informal tests of pupil achievement in learning skills and subject matter

Standardized achievement tests

Tests and ratings of personal traits

Inventories of interests

Ratings of actual work done by children in terms of work habits accuracy following directions and other factors

Records of details about pupil behavior e.g. participation in discussion the use of library books complying with health regulations and the like See references 15 18 23 25 29 32 33 34 35 37

Techniques of guidance described in Chapter 20 such as anecdotal records, cumulative records of pupil progress through the school and teacher pupil conferences can be used to evaluate the extent to which the learning goals set up for each child are being achieved

The setting up of controlled experiments for evaluating contrasting methods in matched classes such as those described in some of the reports in the references at the end of this chapter lies outside the province of the classroom teacher

The 'Middle of the Road' Position

The best schools have never been characterized by faddish tendencies, nor, on the other hand by extremely rigid impersonalized programs. Extreme positions in education are always bad. No sane educator would countenance an extremely formal essentialist point of view or the radical informal freedom of the wild eyed progressives. Those who contrast progressive and essentialist education are usually contrasting extreme practices not the customary methods found in good teaching.

The schools that tended a few years ago to swing to an extreme position in advocating handwork and sheer physical activity as a reaction against academic book work have generally modified their practices to a more intermediate position.

A competent teacher who understands children and has a good background for teaching can obtain superior results by various methods. Teachers are not all equally competent with the same

method There must always be some trial and error to determine the best practices to follow with any group Unimaginative or unresourceful teachers nullify even the best programs

Most of the new trends are not so new after all There have always been progressive teachers who deviated from the beaten path, were not "set in their ways," had better sense than to follow a stereotyped blueprint for teaching, and used originality in their teaching

Higher Costs

Richer educational experiences for every child during his years of compulsory attendance at school do cost more than traditional school training But it seems a sound argument that if the United States of America can finance a war which cost 300 billion dollars, and if its citizens can pay a "gate" of two million dollars for a prize fight, it has ample means to support a thoroughly up to date system of education In a survey of one Eastern state where expenditures for education exceed the average, it was disclosed that for every dollar spent for education, \$1 61 was spent on alcoholic beverages, and that for every dollar spent on all luxuries combined, only 31 2 cents was spent on education Paul Mort (39) has shown that there is a substantial correlation between the per pupil cost of instruction and the quality of teaching

Counteracting Reactionary Tendencies

There will always be forces at work in every community which attempt to defend traditionalism in school practices and seek to thwart efforts to modernize the schools The forward looking educator is challenged, first, to marshal the evidence in favor of the newer practices in the schools and, second, to inform the public of these facts Pressure for retrenchment can be combatted through publishing the sort of factual data reported in this chapter

The School and Public Relations

The support of an informed and enlightened public is needed in any community that aspires to better schools, for the schools can progress no faster than public sentiment permits The school must take the initiative in helping the average taxpayer to understand the changes that are required to keep the public schools abreast of the times and in enlisting support for school improvement A school building program or a campaign for better teacher salaries will be

- 2 In what ways do the newer methods contribute to self motivation of learning?
- 3 What evidence is there that methods in modern schools serve to discipline the pupils?
- 4 Summarize the experimental evidence in favor of the newer practices in education
- 5 Summarize briefly the chief findings of Leonard and Eurich (20)
- 6 Suggest further experimentation that might be carried out to evaluate innovations in school practice
- 7 What are some of the objections most commonly voiced against innovations in education? How can these arguments be met?
- 8 What precautions need to be taken to insure the success of the newer practices in education?
- 9 What steps could be taken to inform the general public about the work of the school?
- 10 What can be done to influence community sentiment in favor of improved methods in harmony with principles of organized learning?
- 11 Write five additional questions or suggested exercises based on the chapter

REFERENCES

- 1 Baker G Derwood ed *New Methods Versus Old in American Education* New York Bureau of Publications Teachers College Columbia University 1941
- 2 Breed Frederick S and Ralston Alice L. The Direct and Indirect Method of Teaching the Addition Combinations *Elementary School Journal* 1936 37 283 298
- 3 Brownell William A. *Arithmetic in Grades I and II* Durham N C Duke University Press 1941
- 4 Chamberlain Dean, Chamberlain Enid Drought N E and Scott W E. *Did They Succeed in College?* New York Harper & Bros 1942
- 5 Collings Elsworth. *An Experiment with a Project Curriculum* New York The Macmillan Co 1923
- 6 De Lima Agnes. *The Little Red Schoolhouse* New York The Macmillan Co 1942
- 7 Dickie Donald J. *Enterprise in Theory and Practice* Toronto W J Gage & Co 1940
- 8 Gardner D E M. *Testing Results in the Infant School* London Methuen & Co Ltd 1942
- 9 Gates Arthur I. "A Modern Systematic Versus an Opportunistic Method in Teaching Reading" *Teachers College Record* 1926 27 679 700
- 10 Gavian Ruth W and Cox Warren W. *Factors Related to Pupil Progress* A report of the State Department of Education Division of Research Albany New York the Department 1941
- 11 Gustin Margaret and Hayes Margaret L. *Activities in the Public School* Chapel Hill University of North Carolina Press 1934
- 12 Harap Henry and Mapes Charlotte E. Learning of Fundamentals in an Arithmetic Activity Program. *Elementary School Journal* 1934 34 315 325
- 13 Harding Lowry W and Bryant Inez P. An Experimental Comparison of

- 34 Wrightstone, J Wayne *Appraisal of Newer Elementary Practices* New York Bureau of Publications, Teachers College, Columbia University, 1938
- 35 Wrightstone, J Wayne and others "Measuring Social Performance Factors in Activity and Control Schools of New York City" *Teachers College Record*, 1939, 40, 423-432
- 36 Wrightstone, J Wayne "Evaluation of the Experiment with the Activity Program in the New York City Elementary Schools" *Journal of Educational Research* 1944 38 252 257
- 37 Aiken Committee of the Progressive Education Association *Adventures in American Education* New York Harper & Bros, 1942
- 38 *Final Report of the Speyer School* Board of Education Bulletin No 12, New York City, 1941
- 39 *What Education Our Money Buys* Educational Conference Board of New York State Albany New York The Board, 1943

INDEX

- Ability, creative, and the arts, 173, and expression in art 172
 Ability grouping 391-392
 Activities in first grade, 247-249 (See "Units")
 Adams, Agnes, on assemblies 297
 Adjustment, deterrents to 353, improvement of 354, problems of school children 351 ff., teachers 396
 Adolescents, growth goals 9
 Aesthetics, experiences in 81, 91, expression education for 12
 Aikin, Willard, on experiment in education, 423-424
 Alexander, Martha, on junior primary organization 256
 Americanization work in, 205
 Apperception, 61
 Applied arts (See "Arts")
 Appraisal of individual pupils, 342-343 (See "Evaluation")
 Architecture, unit on, 116
 Arey, Charles K., on elementary science, 163
 Arithmetic, 231, in the first grade 254, in units, 102-104, 121-122, 123, 161
 Arts, Applied, 172 ff., in units 120, 123
 Arts, Fine, 138-172 ff.
 Arts, Graphic 138, 179 ff.
 Arts, Industrial, 181 (See "Arts, Applied")
 Arts in the modern school, 172, in units, 119, 123
 Arts, Practical 138, 172 ff.
 Assemblies, 297-299
 Attitudes, Dr. Dewey on, 192, learning of, 292
 Audio-visual aids, 261 ff.
 Bailey, Edna, on child study, 345
 Baker, G. Derwood, on evaluation of experimental education, 418
 Baldwin, J. Mark, on child study, 60
 Barnes, Emily, unit on architecture, 116
 Barry, Emily, junior high school unit, 134
 Barton, J. W., learning experiment, 35
 Baruch, Dorothy, on traits of teachers 409
 Baxter, Tompase, Latin America study of, 129
 Beach, Vera, on classroom equipment, 180
 Beginners' experiences of 24, ff. parents of 255-256 topics for 93
 Behavior, plasticity and modifiability of in childhood 51-52, problems 171-172 social learned through school contacts 284-285 traits, activity, 46
 Benedict, Agnes, after school clubs and play centers 302, 333
 Bergson, Henri, on growth 51
 Bisset, Alfred, on centers of interest 30
 Biology 107, 157
 Bishop, Elizabeth, on child study 345
 Bonser, Frederick, on value of work experience 29
 Books use of in instruction 262 (See "Materials of Instruction")
 Boynton, Paul L., on learning 44
 Bratton, Dorothy, on child adjustment 356
 Bressler, Mary, on classroom equipment, 180
 Bridge, Edna, science in it, 161
 Bristow, W. H., on intercultural education, 195
 Brownell, W. A., on learning, 35
 Camping as school experience 334
 Carroll, Herbert, on learning 40
 Character education, 302-303
 Child, development, principles of, 8, 51, role of maturation in, 53, self management at school, 283 social and cultural experiences influencing 56, study by teachers 345, through community contacts 345
 Child, girl ed. provisions for, 400-401
 Citizenship, training for, 144, and community resources, 329
 Civics, 138

- Clapp, Elsie, on community education, 319, 323, 335
- Clark, Ella, on school excursions 270
- Clark, Mildred learning experiment 34
- Classroom organization and management, 282 ff, as a workshop, 283, pupil participation in 285
- Coeducation, 288 289
- Cole, Stewart on intercultural education, 194, 196 199, 200, 206
- Coleman, Satis N, on school music 175
- Collings, Ellsworth on evaluation of experimental education 419
- Comenius, Johann, on viewpoints in education 4, 27
- Community, agencies 319, and the school 315 ff, and school relations program, 427, as a laboratory for social studies 322, betterment through education, 330, children learn about the, 320 321, education for citizenship, 329, education in New York City, 327, education in rural schools, 331 332, educational resources of, 325-327, functions of school in, 317, school in service of 318-319, guidance in leisure time, 332 333, resources for curriculum projects 326 327, resources for instruction 272, resources in upper grades 324, school as a social center in 334, schools planning for, 316, service clubs 330 331, studies in eighth grade, 324, study fourth grade, 324, topics in classroom 323 ff
- Conservation of plant life, upper grade project 106
- Continuous progress, 'straight promotion 388
- Cooperative planning 111 ff, 285 286, 412
- Core courses 84 85, 92
- Course of study, outlines, 134, preparation of 133, Virginia, 97, 132, 135, 158 159
- Criteria for choice of unit activities, 111 112
- Curriculum areas of experience in the, 91, bulletins, 134, for beginners, 243 ff planning committees, work of, 133 134
- Dalton Plan, 395
- Dance in education, 177
- Dashiell, John on learning 39
- Decroly, O, on methods in education, 30, 31, 39
- De Lima, Agnes, on Latin America, study of, 129, experiences of beginners, 248
- Dent, Harold, on new trends in education, 5
- Departmentalization, limitations of 74
- Development, child (See "Child")
- Dewey, John, on experimental education, 28 29, on interest, 42, on attitudes, 192
- Dickie, Donald on enterprises, 31
- Discipline, 293, 294
- Discussion and conversation in class, 283, 286
- Dramatics 138, 180 ff, 181
- Drawing 177, 179, in beginning school work, 248
- Drill, and repetition in organized learning, 37, children's interest in, 236-237, in skills 236-238
- Driscoll Gertrude on child study, 345, on guidance, 341
- Economics, 138
- Education, and life today, 3, basis of social progress, 4 5, changes and trends in, 7, evaluation of experiments in, 416 ff, 423-424, for community living, 315 ff, for health, 306 ff, for world citizenship, 208 ff, intercultural, 191 ff, new trends in, 26 27, of parents, 363 ff; practical, 30, reform in, 14 15, 426, resources for, 259 ff, teacher's role in, 405 ff, to meet the needs of individuals, 386 ff
- Education, intercultural and school life, 201 202, aims and goals of, 192 193, Bureau of, 206, community activities for, 203, features of school program for, 193 ff, in California, 204, in the elementary grades, 199, in high school, 200 201, 202, in New York City schools, 197, 201, materials for 205 206, methods in, 196 ff, school's task in, 192, teachers' role in, 195, unit studies in, 199
- Equipment and resources for instruction, 79 180 259 ff
- Eurich, Alvin, on evaluation of experimental education 423
- Evaluation, by means of pupil observation, 345, of classroom achievement, 425, of New York City activity program 421, 422, of results in unified teaching 416 ff, through achievement test results, 419-420, through objective

- studies and surveys 18, through testimony of graduates of schools 418, through testimony of teachers, 416
- Exceptional child, provisions for, 398, 400
- Excursion, as an educational resource, 279, into the community, 269, 273, in community education, 328
- Exhibits for instruction, 274
- Experiences, areas of in education 91, background of for learning the three R's, 251, in units, 92-108, of children as basis for beginning school work, 248-250
- Extracurricular activities, 130
- Fallis Edwina, on materials of instruction, 259
- Ferrere, A., on the activity program 31
- Films, instructional, for school use, 262-264, library of, 262, references to sources of, 278
- Fine arts (See 'Arts')
- Fine, Benjamin on education for world citizenship, 213
- Fitness, physical, 312, well being 9 (See Health)
- Flemming, Cecile, on individualized instruction, 398
- Flexner, Abraham, on science education, 158
- Food study, and health, 310-312, project on, 120-122
- Foreign languages 138, 183-186
- Forkner, Hamden L., *Developing a Curriculum for Modern Living*, 90
- Foundations of education, psychological, 33-63
- Francis Thomas, Latin America, study of, 129
- Franklin, Adele, after school clubs and play centers, 302, 333
- Gans, Roma, on the daily schedule, 130
- Gardner, D. E. M., on evaluation of experimental education, 422
- Gates, A. I., on learning, 48
- Geography, 138, 146
- Gesell A., on child growth 52
- Goals in education 7-13
- Goldman, Bernard, on evaluation of experimental education, 422
- Goodwin, J., on learning 35
- Graphic arts (See "Arts")
- Griffith, Coleman, on child growth, 52
- Grinstead, Wren, on learning, 35
- Group, cooperation, 286, discussion, 283; study of pupils, 345
- Grouping and promotion, 287, 391
- Growth, as refinement and specialization, 54, stages in, 51-52
- Guidance, advantages of in elementary school 341, conference, helping pupils by means of, 356, conference report of, 356-360, contribution of to the unified program, 340, functions in the school 339-340, in personal development, 82-339 ff., teacher the key person in, 340
- Guilford, Joy P., on learning, 35
- Gumlich, Helen, on unit topic for primary grades, 94
- Gustin, Margaret, on the daily schedule, 130, on evaluation of unified teaching, 417
- Habit training, in first grade, 246
- Hall, G. Stanley, on child study, 60
- Handwriting, 228
- Hayes, Margaret, on the daily schedule, 130, on evaluation of unified teaching, 417
- Health, and nutrition, 310-311, and the school cafeteria, 311, cooperation with school agencies for, 307, home cooperation in educating for, 307, education, 138, 306 ff., instruction in the unified program, 308-310, school program for, 306, 309, services, 307
- Herbart, Johann, on apperception, 61
- High school integrated courses, 85, projects, 106, Far Eastern Studies, 153
- Hildreth, Gertrude on reporting to parents 383
- History, 138, 144-145; American, 145; in units, 103, 105, 123, 147 (See "Social Studies")
- Hobbies, in school program, 300
- Hockett, John, on the daily schedule, 130
- Home, and school relations, 363 ff., visiting, 369
- Horgan, Josephine, *The Story of Lysistrata*, 103
- Human relations, 143, in the school, 104, 407-410
- Hughes, Avah, community studies 321
- Hunnicut, Clarence, on evaluation of experimental education, 423
- Huxley, Julian, on UNESCO, 219
- Hygiene, 309 (See "Health")
- Individual pupils, differences in, first grade, 254, educational provisions for,

- 83, 388 ff, *meeting the needs of*, 386 ff, *through guidance services*, 397, 398, *understanding of*, 341, 342
- Industrial Arts (See "Arts")
- Initiative, scope for pupil*, 71
- Instruction, *aids to*, 275, *differentiated*, 312, *units of*, 393, 394
- Integrated courses, 84, *teaching in social studies*, 140
- Integration of subject areas, 114
- Intercultural education (See "Education")
- Interests and concerns of children in learning, 42, *significance for child development*, 58
- Irwin, Elizabeth, *on school atmosphere*, 282, *on evaluation* 419
- Isaacs, Susan, *on the teacher's role*, 410
- Jacobs, E. V., *on adjustment teachers*, 396
- Jacobson, E. W., *on the daily schedule*, 130
- Jersild, Arthur, *on children and the radio*, 265
- Johnson, William H., *on adjustment teachers*, 396
- Junior high school, *curriculum planning for*, 134
- Junior primary organization, 255-256
- Katona George, *on organized learning*, 37, 38, 39, 45
- Kawin, Ethel, *on relationships with parents*, 256
- Laboratory schools 29
- Langer, W. C., *on learning*, 35
- Language, 228 ff, *arts, interrelationships among*, 228-229, *in beginning school work*, 248, *in units*, 120, 123, *through publication* 300
- Languages modern foreign 186
- Latin America, *study of*, 116 129, 151
- Laton Anita, *on child study*, 345
- Learners, *slow, projects for*, 101, *provisions for*, 398, 400
- Learning, *at first hand*, 68, *children's methods in*, 71, *developmental*, 40 *experiences for the unified program*, 90 ff, *experiments* 35-39 *goal seeking attitude in*, 40 *how practice aids*, 44, *incidental and spontaneous* 41, *interest and effort in*, 42-43 *methods*, 70
- Learning organized applicability of 38, *evaluation of results with*, 416 ff, *experiences for*, 84, *features of learning in first grade*, 246 247, *in the rural school*, 86, *process*, 22, *principles of*, 33, 34 ff, *readiness for*, 43, *recent experiments in*, 37, *retention of*, 38
- Learning, *socialized, and democratic experiences*, 81, *areas of experience in*, 91
- Learning, *unified, as educational trend*, 18, 25, *background for*, 27-31, *daily schedule for*, 77, *evaluation*, 416 ff, *in first grade*, 243, 245, *in problem solving*, 24, *learning skills in* 78, *of content and skills* 73 *program for*, 74, *schedule for*, 128 129
- Leonard, John, *on evaluation of experimental education*, 423
- Lewin, Kurt, *on participation in a democracy*, 285
- Library, 268, *advantages of central school* 269, *use of books and references*, 278
- Life in the school, 80, 281 ff
- Lippett, Ronald, *on evaluation of training*, 424
- Literature, 138, *American*, 167, *and the arts*, 91, 169, *for social understanding*, 167, *in social studies project* 169, *in the school program*, 166 ff, *in the unified program*, 168, *new trends in teaching*, 168, *objectives in school study*, 166-167, *study of the classics* 169
- Loftus, John, *on evaluation of experimental education* 422
- Long, Louis, *on learning*, 35
- Mabee, Elsie, *on food study*, 120, 312
- MacKintosh, Helen, *on camping*, 334
- McGeoch, Grace, *on learning*, 35
- McKim Margaret, *Developing a Curriculum for Modern Living*, 90
- Manners, *training in* 303
- Maps, *study of*, 147, 264
- Martin Isabel, *unit on conservation*, 106
- Materials, *for demonstrations* 273, *of in structure*, 259 ff
- Measurement of outcomes (See "Evaluation")
- Meiklejohn, Alexander, *on UNESCO*, 221
- Mental hygiene, 82, *in the classroom* 354-356
- Merrick, Nellie I., *on school publications*, 300
- Methods, *in first grade*, 243 ff, *in unified teaching*, 67 ff, 114 ff, *individual*,

- 390 ff., of evaluation, 345, 425, of instruction, 243 ff., with audio-visual aids, 361 ff.
- Miel, Alice, on materials of instruction, 259
- Modeling, 177, 179
- Montessori, Mme. on child education, 30
- Motion pictures, use in instruction, 261
- Motivation, 73
- Museum, as educational resource, references to, 279, children's, 274, exhibits 274
- Music 138, in school 174 ff., in the unified program, 176, in unit studies 123
- Newark, Lewis on practical arts, 179
- New York City, Curriculum Committee teaching handbook 135, experimental program, 113 114 132 facilities for excursions 271, program for intercultural education 201, program for training in world citizenship, 213, school schedules 129, Schools Planning Committee, 114
- Objectives of education 7 13
- Observations of child at school, 343-344, of group, 346
- Painting 177, 179 (See "Arts")
- Parent school relationships, 363 ff
- Parent study groups 367
- Parent Teacher Association, work of, 364-366
- Parents and school 82, assist in the school 370-371, conferences, 380-383, neighborhood surveys 366, library service for, 371, participate in school planning, 370, questions 366 367, report to the school 383, visit the school, 367 368
- Parker, Francis, on activity education, 28
- Parkhurst Helen, on the Dalton Plan 395
- Participation, Social 287, program at school, 301
- Paulsen Frederick, on practical education, 30
- Pestalozzi Johann on learning through experience, 28
- Piaget, Jean on child development, 56, 57, 60, 61, 62
- Pictures and graphic materials in instruction 261 264 278
- Planning, cooperative (See Learning)
- Play, function of in child development, 57
- Play making 180-181
- Poetry, assembly, 171, hour, 171 (See "Literature")
- Porter, Martha, on the daily schedule, 130
- Practical arts (See "Arts")
- Prescott, Daniel on child study, 356
- Primary grades, unit topics for, 94
- Problem solving, 67, developing capacity for, 10
- Program, expansion in 76 for unified teaching, 125 ff., in intermediate and upper grades, 129
- Projects, care of pets 101, gardening 103, fifth grade 104 food study 120-122, fourth grade, Evolution of Lighting 102 grocery store, 102, handling the milk 102, in first grade 248, in the primary grades, 94 making lamp shades, 104, stamp sales 103
- Pupil participation, 285, in planning 285
- Pupils, records, 350, self appraisal, 349, 380
- Radio and recordings instruction by means of 264 ff., references to in instruction 277
- Rating of pupil behavior, 346, 347-348, Winnetka Scale 347
- Readiness for learning, 243, an aspect of child development 59, for social adjustments and work habits, 246, of parents, 256
- Reading 228 230, in first grade, 251-253, in units, 106 119, 123
- Recordings libraries of 267 (See "Tools and Resources of Instruction")
- Records narrative, 348 pupil 349 ff
- Records, phonograph, use in instruction 266
- Recreation, 312 clubs at school 301-302, supervision of community 333
- Reports illustrations 376-377, 380, new trends in 375 376 of class activities 379, principles of making, 373-374, techniques for making 375, to parents, 372 ff
- Responsibility education for 11, teaching pupils to assume 290-291
- Rote learning reaction against 18
- Rousseau, J. J., on child activity, 56, on music, 175
- Rural schools farm unit, 108, themes for unit study, 100

- Safety and first aid, 313
- Schedule, first grade, 250, illustrations of, 128 130, newer trends in, 126-128
- Schoelkopf, Alice, on junior high school unit, 134
- School and community, 82, and home contacts 320, and public relations, 426-427, assemblies, 297 298, cafeteria, 311, camp 334, council, 295 296, 297, environment, 281, farm, 333, government, 295 ff, in transition, 13, life, 284, life activities, 130, 300, management, modernization of, 14, program, activities to be scheduled, 125-126, publications, 299 300, pupil participation in, 293, 295, 297, recreation clubs, 301
- Schuman, Frederick, on world federation, 209, 210
- Science, 138, activities through the grades, 159 160, children's early interests in, 157, experiments in the elementary school, 120 121, 158, 160, 163, in the high school, 164, in the unified program, 156 ff, in units, 119, 123, study of aeronautics, 163, study of conservation, 162, study of marine life, 163, study of rocks and minerals, 161, study of the weather, 160, teaching, 157, topics as basis of assembly programs, 164
- Sciences, physical and natural, 91, education in 156 ff (See 'Science')
- Seagoe, May V., on learning 39
- Seay, Maurice, on community education, 318, 320, 329, on daily schedule, 129
- Seeds, Corrine, on child activities, 57
- Seyfert, Warren C., on school publications, 300
- Shannon, John R., on school excursions, 270
- Sherrington, Charles, on motor responses, 57
- Singing, 175
- Skills, evaluating outcomes in unified teaching of, 240, importance of, 224, improving practice in, 236, 237, improving through diagnosis, 239, individualized practice in, 239, introduction to, 233, in the unified program, 224 ff, 231, 232, learning with understanding, 228, limitations of traditional teaching, 225, mastering the demons in, 236, mental maturation as a factor in learning 227, need for practice to learn, 235, 236, new viewpoints in teaching 225 226, postponement of formal training in, 233, practice in daily periods, 239, simplifying instruction in, 234, teaching in advance of use, 235, teaching for meaning, 227
- Smith, J. Russell, on local source materials, 329
- Social studies, 91, 138 ff, curriculum organization for, 139, experiences and equipment for, 142, in high school, 152, in the elementary grades, 142, objectives, 139, primary grades, 148, 149, topics for the elementary grades, 147-148, 149, 150, 151
- Source materials, regional, 328-329
- Special teachers, 182
- Spelling, 228, 253, in units, 123
- Spencer, P. R., on individualized instruction, 398
- Springfield plan in intercultural education, 203
- Stern, William, on child study, 60
- Story hour, 170
- Strang, Ruth, on the teacher's role, 405
- Stratmeyer, Florence B., *Developing a Curriculum for Modern Living*, 90
- Students, nonacademic curriculum for, 83
- Studer, Norman, on community education, 324
- Study, skills, 289, techniques, 71
- Study, topics, 96, 104, 105, architecture, 327, evolution of lighting, 102, food study, 120 122, 310 311, junior high school, 99, ninth grade, 107, senior high school, 100, 107, South America, 105; timeliness of, 75
- Sweeney, Frances, on junior high school unit, 134
- Swenson, Esther, on learning, 35
- Subject matter, 76, 138, teaching, 73-74
- Syllabus outlines, 134
- Taba, Hilda, on intercultural education, 198
- Teacher, and human relations, 407, 410, and pupil cooperation in the classroom, 412-413, as a learner, 413, conferences with pupils, 346, in parent relationships, 364, learning with the pupils, 411, participation in school management and curriculum making, 412, preparation of, 413, role of in child guidance, 406-407, self appraisal, 414, special, 182, the guide to learning, 405,

- traits of successful, 406 ff , work of, 84, 405
- Teaching materials, central bureau for, 275 (See "Tools and resources for learning")
- Teaching unified, contrasted with correlation 77 78, cooperative planning for, 131, with subject teaching 131
- Television instruction through 266
- Tests, 343, 425
- Textbook study, continued need for, 79, 267, 268
- Thinking process, growth during childhood, 59, 60
- Thornbike Robert, on evaluation of experimental education 422
- Tippett James on community study 323
- Tipton Ellis M., on intercultural education, 204
- Tools and resources for learning 259 ff
- Training in skills and habits, 12, for economic competence, 143
- Transfer of training through meanings, 44
- Traxler, Arthur, on pupil records 350, on reporting to parents 375
- Trips, educational (See "Excursion")
- Tyler, I Keith, on evaluation of experimental education, 423
- UNESCO 212, 216 218, and training for world citizenship, 208, charter, 215 goals, 219, 220, program, 220, 221, proposals for activities, 220-222
- Unified learning (See "Learning")
- Unified teaching (See "Teaching")
- United Nations organization, 211, 213 214, and study of world unity, 152, mock sessions 215
- U.S. National Committee of UNESCO, 222
- Units criteria for choice of 111 112, development of 117 on fruit farming 118 120, on lighting 103 planning for teaching of 111 114 117 118, sequences in an experimental school, 98 topics for, 94, 95 96, 98-99, 101, 122-124
- Van Alstyne Dorothy on pupil ratings 347
- Van Til William, on intercultural education, 198
- Variability among school children 336 ff
- Vickery, William, on intercultural education, 194 196 199 200 206
- Virginia Course of Study, 97, 132, 135 158-159
- Visual aids 261 264
- Wade, John on guidance 339
- Ward Winifred on playmaking with children 181
- Weber, Julia, on intercultural education 199
- Welch, Livingston, on learning 35
- Whole part learning 46 ff
- Woodworth R. S., on learning 48
- Wortester, D. A. learning experiment 34
- Work experience, 202 291, projects for 330
- Work habits 289
- World citizenship education for 208 ff , manual for, 221 New York City program for, 214 objectives of training for, 210 pupil participation in education for, 212 school programs for, 213 task of the school in training for, 211 training objectives 214
- World peace education for 115 ff community and home cooperation for education in 219, national participation in programs for, 219 programs to insure, 217, study topic 218
- Wright Josephine, on reporting to parents 383, on evaluation 417
- Wright Lulu on first grade activities 101 248, 323
- Wrightstone J W., on studying beginners 344, on evaluation 419
- Writing and spelling in the first grade 253
- Young Bess, on unit on architecture 116